Army Regulation 200–3

Environmental Quality

Natural Resources—Land, Forest and Wildlife Management

Headquarters
Department of the Army
Washington, DC
28 February 1995

UNCLASSIFIED

SUMMARY of CHANGE

AR 200–3
Natural Resources—Land, Forest and Wildlife Management

This Army regulation--

- Sets forth responsibilities, policies, and procedures to wisely use, scientifically manages and systematically restore renewable natural resources existing on Army lands consistent with the local military mission, national security, and current Federal laws pertaining to renewable resources and the quality of the environment.

- Coordinates responsibilities, policies, and procedures for protection and enhancement of historic properties on Army lands (chaps 1 and 2).

- Incorporates requirement of the Army Community of Excellence Program into Army land management functions (chaps 1 and 4).

- Addresses the RCS -- 1383 Budget Report.

- Addresses changes to management functions for soil sedimentation and the changing wetlands issues (chap 2,3,and 6).

- Addresses the Environmental Quality Control Committee (EQCC) (chap 2).

- Revises training lands section to include the Integrated Training Lands Management Program (ITAM) (chap 3).

- Adds a section on Urban Forest Management (chap 4).

- Clarifies pet cemeteries and plantings of annuals on military installations (chap 4).

- Revised forestry management section provides new guidance and clarification of forest ecosystem management, funding actions, disposal procedures for small lot sales, protection of the resource, and equipment purchases in excess of the expenses/investment threshold (chap 5).

- Adds new and expanded guidance on management of threatened and endangered species on Army lands (chap 11).

- Addresses law enforcement for natural resources management (chaps 2 and 6).

- Clarifies Army’s hunting, trapping, and fishing permit fee program and describes how fees may be used (chap 6).

- Incorporates AR210-9 in its entirety (chap 8).

- Revises Army rules for the Secretary of Defense Natural Resources Conservation Awards Program to include Active Army installations and facilities worldwide (chap 10).

- Deletes appendix C, the annual reporting requirement for Installation Natural Resources Report, Parts I, II, and III.

- Adds a glossary.

- Adds an index.

Headquarters
Department of the Army
Washington, DC
28 February 1995

*Army Regulation 200–3

Effective 28 March 1995

Environmental Quality

Natural Resources—Land, Forest and Wildlife Management

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:

MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army

History. This issue consolidates AR 420–74 and AR 210–9. This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

Summary. This regulation prescribes current Army policies, procedures, and standards for the conservation, management, and restoration of land and the renewable natural resources therein consistent with and in support of the military mission and in consonance with national policies.

Applicability. This regulations applies to the Active Army, the Army National Guard, and the U.S. Army Reserve.

a. This regulations applies to all commanders of major Army commands field operating agencies, installations (both contractor and government operated), and activities (using appropriated and non–appropriated funds) under control of the Department of the Army by Public Land Order, Executive Order, fee–owned lands, or similar instrument, under the following conditions of use:

(1) Installations and activities in active use by the Army, those held in an inactive or standby condition for future use by the Army, and those in an excess category (see AR 405–90, para 6–2) for further guidance with respect to excess properties).

(2) Federally owned State Army National Guard operated installations and activities or portions thereof which are in full–time or intermittent use by the Army National Guard.

(3) Installations and activities, or portions thereof, which are in full–time or intermittent use by the Army Reserve or ROTC.

(4) OCONUS installations shall comply with this regulation as applicable, and as outlined in accordance with the Final Governing Standards of the Overseas Environmental Baseline Guidance Document (OEBGD) and the laws for that particular host nation.

b. This regulation does not apply to —

(1) Civil Works functions of the Corp of Engineers.

(2) Facilities occupied by Army activities as tenants when real property accountability and control is vested in another military department of Government agency, such as the General Services Administrations (GSA).

c. Nothing contained in this regulation or in the Fish and Wildlife Cooperative Plans negotiated with the State and Federal authorities will modify any rights granted by treaty or otherwise to an Indian tribe or to members thereof.

Proponent and exception authority. The proponent of this regulation is the Assistant Chief of Staff for Installation Management. The proponent has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation. Proponents may delegate the approve authority, in writing, to a division chief under their supervision within the proponent agency who holds the grade of colonel or the civilian equivalent.

Army management control process. This regulation contains management control provisions in accordance with AR 11-2, but does not contain checklists for conducting management control reviews used to accomplish assessment of management controls (chaps 1 and 2).

Supplementation. Supplementation of this regulation and establishment of forms are prohibited without prior approval from HQDA, Assistant Chief of Staff of Installation Management, Directorate of Environmental Programs, Conservation Division, ATTN DAIM–ED–N, 600 Army Pentagon, Washington, DC 20310–0600.

Interim changes. Interim changes to this regulation are not official unless they are authenticated by the Administrative Assistant to the Secretary of the Army. Users will destroy interim changes on their expiration date unless sooner superceded or rescinded.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to HQDA, Assistant Chief of Staff for Installation Management, Directorate of Environmental Programs, ATTN DAIM–ED–N, 600 Army Pentagon, Washington, DC 20310–0600.

Distribution. Distribution of this publication is made in accordance with DA Form 12–09–E, block number 5450, intended for command levels C and D for Active Army, Army National Guard, and U.S. Army Reserve.

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* This regulation supersedes AR 420–74, 1 July 1977 and AR 210–9, 1 July 1978

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Chapter 1
Introduction

1–1. Purpose

This regulation sets forth policy, procedures, and responsibilities for the conservation, management, and restoration of land and the natural resources thereon consistent with the military mission and in consonance with national policies. Supporting guidance and details are delineated in DA Pam 420–7. The scope includes the conservation, management, and utilization of the soils vegetation, water resources, croplands, rangelands, forests, and fish and wildlife species.

1–2. References

Required and related publications and prescribed and referenced forms are also listed in appendix A.

1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1–4. Responsibilities

Responsibilities for the Natural Resources Management Program are assigned as follows:

a. The Assistant Secretary of the Army (Installations, Logistics, and Environment (ASA(I,L,&E)), will—

(1) Provide Secretariat oversight of Army natural resources management programs (land, forest, and fish and wildlife), including the formulation, execution, and review of related policies, plans, and programs.

(2) Appoint, within the Office of the ASA (I,L,&E), the Deputy Assistant Secretary of the Army (ESOH) to administer the establishment of natural resources program objectives and the appraisal of program performance.

b. The Assistant Chief of Staff for Installation Management will—

(1) Through the Directorate of Environmental Programs, Conservation Division, provide staff supervision of the Department of the Army Natural Resources Program.

(2) In coordination with OASA (I,L,&E), formulate Headquarters, Department of the Army (HFQDA) policies, objectives, criteria, and standards for this program Army–wide.

(3) Provide technical assistance to commands.

(4) Appraise and initiate training programs essential to maintain technical capability of personnel engaged in natural resources management activities.

c. Commanders of major commands (MACOMs), field operating agencies, and the Chief of the Army National Guard Bureau will—

(1) Provide command and technical supervision of the Natural Resources Management Program at installations under their command or jurisdiction.

(2) Assist their respective installations with the developing and implementing programs to ensure conservation stewardship, compliance, surveys, up–to–date plans and protection of resources to include wetlands, scenic areas, threatened and endangered species, and other natural resource special interest areas.

(3) Conduct staff visits as required.

(4) Staff with appropriate natural resources management professionals (para 2–7 and the glossary) who will—

(a) Review technical adequacy of the installation natural resource plans, programs, projects, reports, environmental documents, and the equitable allocation of manpower, materials, equipment, and funding requirements.

(b) Maintain surveillance over land utilization and management.

(c) Review proposals for use or restricted use of chemicals and equipment in vegetative management in accordance with AR 420–76 and approve as appropriate.

(d) Provide technical assistance to installations.

(e) Maintain professional proficiency through training, attendance and participation at professional meetings, and by keeping abreast of new developments and technical standards.

(f) Coordinate with other agencies engaged in natural resources management.

(5) Review, and approve, as appropriate, declarations of timber available for harvest when not within the installation commander's authority.

(6) Review outdoor recreation plans, which involve the use of natural resources, to ensure compatibility with the Natural Resources Management Plans and Programs and the Installation Master Plan.

(7) Ensure that effective natural resources stewardship is an identifiable and accountable function of management at command and installation levels and will be specifically accounted for in performance evaluations.

d. Installation commanders will—

(1) Provide for the funding, staffing of natural resource management professional, and other resources required to effectively manage the natural resources on his or her installation.

(2) Plan land utilization to avoid or minimize adverse effects on environmental quality and provide for sustained accomplishment of the mission.

(3) Where applicable, enter into Cooperative Plans, in accordance with 16 USC 670a, with State and federal conservation agencies for the conservation and development of fish and wildlife, soil, outdoor recreation, and other resources.

(4) Ensure the functioning of a Installation Environmental Quality Control Committee.

(5) Ensure timely coordination of installation current and planned land uses is ongoing (that is between mission, natural resources, environmental, legal, and master planning).

(6) Inspect and review mitigation measures that have been implemented or recommended for the protection of natural resources as prescribed in environmental documentation in accordance with AR 200–2.

(7) Ensure all installation land users are aware of, and comply with, procedures and requirements necessary to accomplish objectives of the integrated natural resources management plan, laws, and regulations, and other measures designed to comply with environmental quality objectives.

(8) Appoint a Department of Defense (DOD) natural resources management professional as the Installation Natural Resource Coordinator. On smaller installations, the installation commander, in coordination with the MACOM, may designate a natural resource management professional who may provide services to several installations on a regional basis to fulfill functions and responsibilities of the Natural Resources Coordinator. The Installation Natural Resource Coordinator will—

(a) Ensure command is kept informed regarding natural resources issues which may impact upon accomplishment of the mission or result in violation of laws, policies, or this regulation.

(b) Ensure coordination of the natural resources program is accomplished with all installation land users, (that is legal, safety, planning, Provost Marshall, public affairs, military training units and environmental) as appropriate.

(c) Provide public affairs with information regarding all natural resources management activities and issues, both positive and negative.

(d) Serve as the single point of contact for installation natural resources issues. (The coordinator maybe part of an organization other than the Directorate of Engineering and Housing (DEH) or the Directorate of Public Works (DPW).

(e) Serve on the installation Environmental Quality Control Committee. Identify issues and make recommendations for the enhancement and management of the integrated natural resource program.

e. Directors of Engineering and Housing, Public Works, or the appropriate Environmental Directors will—

(1) Manage all phases of the Natural Resources Program on the installation with appropriate DoD natural resource management professionals.

(2) Develop programs to ensure the inventory, delineation, classification, and management of all applicable natural resources to include: wetlands, scenic areas, endangered and threatened species,

sensitive and critical habitats, and other natural resource areas of special interest.

(3) Provide for training of personnel.

(4) Implement an Integrated Natural Resources Management Plan (refer to chap 9), as well as applicable ESMPs.

(5) Review all environmental documents (that is, environmental impact assessments/statements and remedial action plans), and construction designs1 and proposals to ensure adequate protection of natural resources and that technical guidance as presented in the Natural Resource Management Plan is adequately considered.

(6) Coordinate with local, State, and federal governmental and civilian conservation agencies relative to the installation's natural resources management program; outside the continental United States (OCONUS) activities should refer to and abide by their Status of Forces Agreements (SOFA).

1–5. Objectives

Objectives are to–

a. Manage installation natural resources to provide the optimum environment which sustains the military mission.

b. Develop, initiate, and maintain progressive programs for land management and utilization.

c. Maintain, protect, and improve environmental quality, aesthetic values and ecological relationships by–

(1) Protecting Army real estate investment from depreciation.

(2) Complying with environmental protection and enhancement policies and procedures as outlined in AR 200–1 and AR 200–2 and those of historic properties as outlined in AR 420–40.

(3) Protecting and improving the natural beauty of the landscape.

(4) Improving the appearance of installations and facilities in accordance with an approved landscape master plan and through initiatives of the Army Community of Excellence and self–help Programs.

(5) Preventing damage and destruction of valuable natural resources from fire, insects, and disease.

(6) Protecting plants and animals and the habitat they depend upon, especially endangered and/or threatened species.

(7) Responding to the increasing need for food, fiber, and timber products and outdoor recreational opportunities by managing lands capable of producing these resources as is consistent with the assigned military mission, and conservation of healthy ecosystems and biodiversity.

(8) Supporting military missions, especially training and field exercises, in a manner which will best accomplish the mission while protecting the environment.

(9) Protecting environmentally sensitive areas such as: flood plains, wetlands, steep slopes, aquifer recharge zones, barrier dunes, riparian zones and natural areas.

Chapter 2
Natural Resource Programming and Analysis

2–1. Program analysis

a. It is the Army's goal to systemically conserve biological diversity on Army lands within the context of its mission. The Army recognizes that natural ecosystems play a vital role in maintaining a healthy environment. Natural ecosystems can best be maintained by protecting the biological diversity of native organisms and the ecological processes that they perform and that they are part of. Habitat management is the key to effective conservation of biological diversity and the protection of listed species. Conserving native species in numbers and distributions that provide a high likelihood of continued existence is a crucial element of biological diversity.

b. Special consideration will be given to soil and vegetation characteristics, surface and subsurface water, wetlands, archaeological, and geological sites, flood plains, and wildlife resources in the development, design, construction, and maintenance of an installation and the performance of its mission. See AR 420–40. All reasonable efforts will be made to protect the land and water resources to minimize loss, degradation, or destruction. Measures will be taken to control sources of pollutants harmful to the land and its resources.

c. All personnel will comply with the environmental quality policies and procedures specified in AR 200–1 and AR 200–2 and those standards established by applicable federal, State, interstate, international SOFA, or local authority.

d. Natural resources is an integral part of the environmental management program and will be a specific part of the assessment of continuing and planned programs as required by AR 200–2. Commanders and their staff ensure that their installations comply with all applicable federal, State, and local environmental laws. Failure to comply may result in personal liabilities.

2–2. National Environmental Policy Act

a. The National Environmental Policy Act (NEPA) establishes policies and goals for the protection and enhancement of the environment. Integrated natural resources management plans require appropriate environmental review according to the NEPA and AR 200–2, prior to implementation of the plan's objectives. Public review and/or comment periods are required for Environmental Assessments (EAs) and Environmental Impact Statements (EISs) prior to implementing the plan. The appropriate level of environmental documentation will be determined based upon requirements set forth in NEPA and AR 200–2 on a installation by installation basis. Issues of concern related to impacts on natural and cultural resources include, but are not limited to, endangered species, wildlife, riparian zones, flood plains, wetlands, archeological and historic sites, off–road vehicle use, sedimentation, erosion, timber harvesting, and non–point source pollution.

b. It is Army policy to integrate environmental reviews concurrently with other Army planning and decision–making actions to avoid delays in mission accomplishments. All natural resources management plans developed, updated, or revised require some level of environmental review according to AR 200–2. Natural resources management plans should be incorporated into Installation Master Plans as a supplemental document, or "component plan" according to AR 200–20, to allow for consolidation when developing the installation master plan NEPA document. Otherwise, NEPA compliance for the Natural Resources Management Program must be accomplished to specifically address the environmental impacts of the proposed natural resources management program, either during the initial development of the Integrated Natural Resources Management Plan or when the major five–year revision to the Plan is conducted.

c. Environmental documentation, to support NEPA compliance requirements, for Installation Master Plans, including the natural resources component plans, will be accomplished with installation appropriated funds. Any interim environmental documents required to support ongoing natural resources programs may be funded by reimbursement from income generated by that program, (for example, agricultural and grazing outlease, forestry, or fish and wildlife permit fee income). Natural resources reimbursable funds will only be used to support those environmental documents directly related to the individual programs.

d. Interim measures will be implemented to ensure thrat the quality of the environment is not adversely affected by ongoing natural resources efforts identified in existing Plans and that compliance with other environmental laws is existing Plans and that compliance with other environmental laws is accomplished. If any potentially significant environmental impacts, (for example, endangered species, archaeological resources, or impacts on wetlands), are identified, compliance is required prior to the initiation of the action. Analyses of the impacts of activities or projects, (for example, training ranges, housing projects, road construction, and weapons

system testing) on the installation natural resources are the responsibility, including funding, of the proponent of the activity or program.

2–3. Resource requirements

a. Staffing.

(1) Since the natural resources disciplines encompassed within this regulation are the natural sciences, commanders will establish the optimum staffing of natural resources management professionals, appropriate to the resources, to ensure necessary technical guidance in the planning and execution of the Natural Resources Program. Commanders will also seek technical assistance from appropriate natural resources agencies (federal, State, and local).

(2) All levels of command will hire and retain natural resources management professionals, as appropriate, who are trained in the disciplines required to implement this program. Continue professional training will be made available. Commanders will establish positions as needed and fill validated positions in accordance with current DOD/DA policy. OCONUS MACOMs will determine appropriate location of natural resources management professionals commensurate with local agreements and projected work loads.

b. Funds.

(1) Natural resources programs are funded with the use of appropriate funds (O&M, Research Development Test and Evaluation (RDT&E), AIF), funded reimbursements (forestry and agriculture leases), and user fees (hunting, fishing, and outdoor recreation). Use of funded reimbursements and user fees is restricted by Federal law and must be planned appropriately. Specific guidance on approved uses and planning procedures are provided in paragraph 2–14a and chapters 5 and 6.

(2) Expenses not directly associated with forest management, agriculture leases, and hunting or fishing programs must be funded from appropriated resources. The natural resources a program manager will be included in all budget planning and programming activities necessary to ensure all natural resources requirements are considered.

2–4. RCS–1383 Budget Report

The RCS 1383 Budget Reporting Process is the primary mechanism for identifying funding requirements for the Army's Environmental Program (including natural and cultural resources). Refer to AR 37–100, and the U.S. Army Environmental, Pollution Prevention, Control and Abatement Report RCS DD–P&L (SA) 1383 (OMBA–106 Report), as amended.

2–5. Installation Environmental Quality Control Committee

a. All installations, except satellite installations, are required to have an Environmental Quality Control Committee (EQCC). The EQCC is composed of members representing the command, operations, training, engineering, planning, housing, recreation, environmental, natural resources, legal, safety, public affairs, and medical interests of the installation, including tenant activities. Representatives of federal and State natural resource agencies, and local civilian conservation groups, may be invited to attend committee meetings as guests. EQCC meetings are to be scheduled quarterly, at a minimum. The frequency of meetings will depend on environmental requirements and actions.

b. The EQCC helps to plan, execute, and monitor environmental actions and programs, including natural resources. The committee identifies issues, makes recommendations, and advises the installation commander on priorities, policies, and strategies for the compliance, management, and enhancement of the integrated environmental and natural resource programs. Refer to AR 200–1, chapter 12.

c. Installation commanders having active natural resource programs will appoint a Natural Resource Conservation and Beautification Subcommittee under the EQCC. The subcommittee objectives are to ensure continuous planning and application of the integrated natural resource program, promoting and fostering natural beauty, landscape enhancement, and protection through the self–help program, natural resource enhancement, protection, and compliance, and cooperation with local communities.

2–6. Training

a. Interdisciplinary training is essential for DOD natural resource mangers. The training it to address practical job disciplines, statutory compliance requirements, applicable DOD/DA regulations, pertinent State and local laws, and current scientific and professional standards as related to the conservation of our nation's natural resources. The natural resource training objective is to identify technical requirements as well as the resources (cooperative agreements, Legacy, ITAM, MOUs, and so forth) available to implement and execute a successful and proactive program. The goal being to maintain and enhance the military mission, biodiversity, conservation stewardship, and the management of the total ecosystem from the practical standpoint of day to day operations as well as long term planning.

b. On installations with listed species, critical habitat, or other environmentally sensitive areas, training and testing directorates, in coordination with the installation engineer (or the environmental directorate when appropriate) will establish a mandatory, ongoing awareness program for all personnel, military and civilian, who may have contact with listed species or their habitat. Refer to chapter 11 (section 11–10) for specific training requirements.

c. The DPW, or appropriate environmental directorate, will provide for periodic and comprehensive technical instruction and training of natural resource management personnel responsible for the control of insects and plant pests.

d. Personnel engaged in weed control operations (including control of objectionable trees, brush, poisonous plants, and aquatic plants) require special training in handling pesticides and associated equipment. Training and certification requirements are outlined in AR 420–76.

e. Persons engaged in the care and maintenance of lawns, trees, shrubs, and other landscape plants should participle in training related to site preparation, soil management, fertilization, turf management, tree care and protection, integrated pest management (IPM), and other horticultural skills.

f. Persons involved in Natural Resource Law Enforcement require special training to meet legal requirements and liability protection.

g. Persons involved in natural resource protection and management should participate in training related to wetlands classification, mitigation, rehabilitation and protection. Wetland training courses are available form the Corps of Engineers (COE).

h. Maximum utilization will be made of locally available training (for example, extension service, university, professional and trade organizations, Government, commercial) and that offered by the armed services.

i. Professional natural resource management personnel (agronomists, wildlife biologists, foresters, and range conservationists) are encouraged to participate in continuing their educational opportunities at universities and professional society functions. This includes leadership, management and compliance training, certifications, and professional development.

j. All personnel engaged in a hazardous waste operation must fulfill the training requirements set forth in Title 40 Code of Federal Regulations (CFR) Part 264.16

2–7. Contracting

a. The management and conservation of natural resources under Army stewardship is an inherently Governmental function. Therefore, the provisions of AR 5–20 (commercial activities program) do not apply to the planning, implementation, enforcement or management of Army natural resources management programs. However, support to the natural resources programs, where it is severable from management, planning, implementation or enforcement actions of natural resources may be subject to the provisions of AR 5–20.

b. Personnel positions which have been validated as required for the planning, implementation, enforcement, and management of the

natural resources program, will not be subject to provisions of AR 5–20. This includes all positions (for example, professional, technical, equipment operators, natural resources law enforcement professionals, laborers, and so on.) which have been validated as a requirement to perform natural resources management. Personnel positions associated with activities which support (on an as needed basis), the natural resources program (for example, equipment operators or laborers from a pool or another shop) may be subject to the provisions of AR 5–20.

c. When entering into contracts for services that implement wildlife management objectives or enforce natural resources laws (that is, wildlife management and endangered species plans and surveys), priority will be given to contracts with federal, State, and local agencies with responsibility for natural resources conservation. In such cases competitive bids are not required.

2–8. Memorandums of Understanding and Agreement

a. Memorandums of understanding (MOU) have been established between the Department of Defense and the Departments of Agriculture (March 27, 1963) and Interior (April 7, 1978) which are applicable to CONUS installations. The memorandums authorize execution of cooperative agreements in attainment of mutual conservation objectives. Installations may develop cooperative agreements with the following:

(1) Department of Agriculture functioning through the Agriculture Research Service, the Soil Conversation Service, and the Forest Service for the use, development, protection, and conservation of forest and other vegetative cover resources, for soil and water conservation, and for research relating thereto.

(2) The Department of the Interior functioning through the U.S. Fish and Wildlife Service (FWS) for the conservation of fish and wildlife resources.

(3) The Department of the Interior functioning through the National Park Service for the development and management of outdoor recreation activities.

(4) The Department of Agriculture functioning through the Animal and Plant Health Inspection Service (APHIS) and Animal Damage Control (ADC) for animal damage control on military installations. A formal memorandum of understanding between the Department of Defense and U.S. Department of Agriculture, Animal and Plant Health Inspection Service was signed May 15, 1990. This MOU established procedures for planning, scheduling, and conducting animal damage control activities, exclusive of routine vertebrate pest control operations, on U. S. military installations within the United States and its territories.

(5) Assistance may also be obtained from other Government agencies not specifically included in the above memorandums of understanding (for example, Agricultural Extension Service, Bureau of Land Management, Environmental Protection Agency, State Historic Preservation Officer (SHPO), universities, State, and local conservation agencies).

b. Memorandum of agreement between the U.S. Department of Agriculture (USDA) (U.S. Forest Service) and the U.S. Department of Defense (DOD) (December 1990) for the conduct of insect and disease suppression on lands administered by DOD. Section 5 of the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2101) authorizes the Secretary of Agriculture to protect trees and forests, wood products, store wood and wood in use from insects and diseases. The U.S. Forest Service has been delegated the responsibility for carrying out the provisions of the Cooperative Forestry Assistance Act. Annual appropriations based on estimated suppression costs developed by the Forest Service DOD, other federal agencies, States, and other cooperating entities, are necessary to implement this reasonability.

c. Master Agreement between the Department of Defense and the Department of Agriculture (September 1988) establishing the standards for the use of national forest system lands for military activity.

d. Cooperative Agreement between the Department of Defense (DOD) and The Nature Conservancy (TNC) (December 13, 1988) declared a policy of cooperation and establishes procedures for planning and conducting cooperative efforts between TNC and DOD on DOD lands. Under this agreement, installation commanders can obtain technical assistance from TNC and State Heritage Programs, as well as allowing TNC to study significant ecosystems under the Army's control.

2–9. Legacy Resources Management Program

The DOD Legacy Resources Management Program (LRMP) was instituted by Congress in 1991 to promote stewardship of natural and cultural resources. Legacy projects demonstrate innovative techniques for the management, conservation, and preservation of resources. Legacy benefits include creative partnerships with worthwhile causes; rewarding personal experiences; and positive public relations for participating installations and the Army and DOD as a whole. These efforts afford us the opportunity to do the right thing in shouldering our stewardship responsibilities for the natural inhabitants of the lands we holds in public trust. HQDA will make requests for proposals for Legacy projects annually (based on authorized funds) in accordance with instructions provided by the Directorate of Environmental Programs, ATTN: DAIM–ED, 600 Army Pentagon, Washington, DC 20310–0600.

2–10. Access to military lands and waters

a. By recreational users.

(1) Installation commanders will provide for controlled recreational access at Department of the Army (DA) installations and facilities containing land and water areas suitable for the recreational use and enjoyment of the public, Such access will be within manageable quotas, subject to safety, military security, threatened and endangered species restrictions, and the capacity of the natural resources to support such use; and at such times as such access can be granted without bona fide impairment of the military mission, as determined by the installation commander.

(2) All opportunities for outdoor recreational use (general public, uniformed military, retired military, or DOD employees) on military lands and waters must be equitable distributed by impartial selection devices, such as a system based on drawings or lots, or a system based on first come, first served.

b. By federal and State conservation officials.

(1) Installation commanders provide installation access, subject to safety requirements and military security to designated State fish and wildlife or conservation officials at such times and under such conditions as mutually agreed between the installation commander and the appropriate designated official of the State in which the installation is located.

(2) Accredited conservation representatives of federal agencies furnishing professional advice and technical assistance under this regulation will be allowed access to the installation, in accordance with appropriate arrangements.

2–11. Multiple use

a. In applying the multiple use concept, special attention will be given to environmental factors, recreation, land use capability, and the incorporation of conservation measures in the development, design, construction, and maintenance of installations. The conservation of natural resources and the military mission will not be mutually exclusive. Consideration will be given to all demands for use of the land and water resources with optimum use being made when consistent with the military mission and sound conservation and environmental concerns.

b. Multiple use of open water impoundments and their watersheds that are used as potable water sources must be carefully managed and protected from potential sources and activities that may pollute to unsafe levels for consumption.

c. Areas that contain natural resources that warrant special conservation efforts will be identified during the inventory and classification process. After appropriate study and coordination, such areas may be managed as "Special Interest Areas" for their unique features. The integrated natural resources management plan will address the special management necessary for the area and all current and future land uses will consider the uniqueness of the area and

plan accordingly to ensure conservation of the resource, and the protection and enhancement of threatened and endangered species habitats.

d. Areas will not be set aside for an exclusive use (for example, wildlife refuge), which may dictate future land use decisions, without appropriate environmental documentation in accordance with AR 200–2 and approval of the office of the Secretary of the Army. Forward request through the MACOM to HQDA, Directorate of Environmental Programs, ATTN: DAIM–ED–N, 600 Army Pentagon, Washington, DC 20310–0600.

e. The exploration and development of mineral resources on federal lands is the responsibility of the U.S. Department of the Interior (Bureau of Land Management). Requests are to be made through installation and MACOM real property offices. The Corps of Engineers is the disposal agency for sand and gravel. Refer to AR 405–30.

2–12. Land use limitations

Determination of the most environmentally acceptable land use is dependent upon such factors as soil, water, indigenous flora and fauna, climate, and topography. Each of these factors, alone or in combination, can limit the use of an area and must be considered during the assessment of operations, maintenance, development, and construction activities. Interpretation of soil types, capabilities and erodability, vegetation, and climatic data by experienced, professional personnel will provide information for determining land use limitations and capability for military operations, construction, timber production, wildlife habitat, outdoor recreation, and agricultural outleasing. Commanders may request the assistance of the local soil conservation district regarding soils information and surveys. Land uses which have a detrimental effect on natural resources, or the potential for such an effect, should be avoided when feasible within mission requirements and objectives.

2–13. Land productivity

On lands controlled by or owned by the United States or any of its agencies, it is the declared National policy to—

a. Minimize exploitation, wasteful, and unscientific management of the natural resources.

b. Preserve and improve soil stability and productivity.

c. Where feasible, to contribute to the social needs and a continuous and stable supply of food, fiber, and timber products through economic use and conservation of the land.

d. Promote land use functions that result in "no net" loss of wetlands.

e. Protect and enhance threatened and endangered species habitats.

2–14. Leases, easements, and other special land uses

Leasing of land for uses which are compatible with mission requirements can reduce installation maintenance efforts, provide opportunities for accomplishing land maintenance by the lessee at no cost to the installation, provide funds which the Army can use to support leasing efforts and other natural resources requirements, and support community relations and local economy. For OCONU, all policy and review decisions relative to outleasing will be the responsibility of MACOM. A Preliminary Assessment Screening (PAS) within applicable NEPA documentation will be accomplished prior to performing any real estate actions. Current PAS documentation, including required forms, should be maintained to meet or supplement NEPA requirements under land use changes. This will help reduce future installation liabilities which can be attributed to environmental hazards on leased property.

a. Agricultural leases.

(1) Military land will be routinely examined to determine what areas, if any, can be made available for outleases. In accordance with the concept of multiple land use, areas which are required to support the military mission may also be outleased for agricultural purposes. The filling, draining, or conversion of wetlands to other uses requires a permit from the COE. Contact the district engineer. The installation commander—

(a) Prepares reports of availability of land for outleasing according to the procedures given in AR 405–80. Agricultural leases will be reviewed for their potential effect on significant historic properties according to AR 420–40, chapter 3.

(b) Includes with the report of availability appropriate portions from the natural resources management plan including applicable threatened and endangered species management plans and land use regulations which pertain to the management of the area made available. Also, includes any other technical provisions outlining conservation measures and practices to be performed by the lessee on the area to be leased which will assure the maintenance and/or improvement of soil productivity and the associated environment. Technical provisions and conservation practices are to be developed in cooperation with the Soil Conservation Service (SCS) and contained within an SCS Farm Plan for each agricultural/grazing lease on the installation.

(c) Ensures that outleased areas are available to the maximum extent practicable for concurrent compatible uses.

(d) Periodically inspects outleased lands to ensure compliance with maintenance, conservation and environmental requirements and report noncompliance to the District Engineer for enforcement.

(e) Provides for the maintenance, protection, repair, and restoration by the lessee of the area leased.

(f) Ensures that installation hazardous materials and waste surveys and restoration activities are conducted in a manner which supports agricultural leasing.

(2) MACOM natural resources management professionals will review all technical provisions outlining land use and conservation practices to ensure their compliance with good agricultural and environment concepts.

(3) Changes and amendments to existing leases which affect the conservation and management practices, including maintenance activities performed, will be a thoroughly coordinated procedure involving the installation (including the Environment Quality Control committee (EQCC)), the MACOM natural resources management professional, and the District Engineer prior to implementation.

(4) Outgrant holders desiring to apply pesticides or conduct animal damage control on Army property, or to contract for such work, must accomplish all tasks according to the approved installation pest management plan. Excluded are outleases whose contract contains provisions for lessees to assume full responsibility for the application of pesticides and animal damage control on their leases according to the provisions of applicable federal laws and regulations. See AR 420–76. Supplemental agreements to existing leases should be negotiated to amend them to comply with this provision. All pesticide uses will be reported by the responsible installation in accordance with AR 420–76.

(5) All revenues from agriculture and grazing outleases will be deposited to the Army account established for that purpose and will be available through established budget procedures (section 2667, title 10, United States Code (10 USC 2667), Outleasing for Grazing and Agricultural on Military Lands) for—

(a) Administrative and operational expenses of agricultural leases.

(b) Initiation, improvement, and perpetuation of agricultural leases.

(c) Preparation revisions, and requirements of integrated natural resources management plans.

(d) Implementation of integrated natural resources management plans.

(6) Requirements for funds derived from lease proceeds will be identified annually in the 1383 Budget Report to the MACOM in accordance with guidance provided by the Directorate of Environmental Programs, ACSIM. ASCIM will provide HQDA with guidance on MACOM reimbursement authority based on requirements identified and funds available.

b. Rights–of–way or easements. For rights–of–way or easements

for power lines, communication facilities, pipelines, and various purposes, see AR 405–80.

2–15. Dust, erosion, and sedimentation control

Installation sources of dust, runoff, silt and erosion debris will be controlled to prevent damage to land, water resources, equipment, and facilities, including adjacent properties. An erosion and sediment control plan must be implemented where appropriate. A protective vegetative cover will be maintained over all compatible areas. Other materials that may be used as appropriate for erosion control include gravel, fabrics, mulch, riprap, and recycled concrete and pavement that is environmentally safe and compatible with the site. When bare ground is required for accomplishing mission objectives, other soil conservation measurers (for example, check dams, wind breaks, diversions, and so on) will be used to control dust, erosion and sedimentation. In order to minimize land maintenance expenditures and help ensure environmental compliance, physically intensive land disturbing activities should be sited on the least erodible lands (those requiring the least cover for erosion control). The potential erodibility of a site (as diagnosed from existing soil types, slopes and vegetative cover), and the location of adjacent wetlands will be identified and analyzed in all prepared plans for development, training, as well as other land uses. Assistance in proper site selection can be provided by the USDA–SCS.

2–16. Recycling of organic wastes

The DEH, or appropriate environmental directorate, is encouraged to provide guidance to personnel and implement a program for the reutilization of organic yard wastes (as warranted by resources). This is to be an integral part of the installations recycling program and goals to reduce solid waster volumes and disposal costs. All grounds maintenance debris should be collected and composted at a designated location. Compost may be used as a mulch and soil amendment for landscape plantings as well as for the rehabilitation of training lands, terminated landfills, and other grounds as appropriate.

2–17. Fire protection

Installation land and facilities will be mitigated of fire hazards and the vegetative growth controlled to the degree essential to the safety of the installation and its natural and cultural resources. Blading, discing or herbiciding of firebreaks will be avoided if excessive erosion and/or runoff (non–point source pollution) may result from such action, or if the affected area is in a PM10 National Ambient Air Quality Standard non–attainment area. Control of vegetation by mowing, prescribed burning, vegetation transition, grazing and other means will be used as alternative to bare ground firebreaks and the use of herbicides where possible. Prescribed burning is an effective and efficient means to reduce or prevent the accumulation of hazardous fuels, where permitted, and will be used as a recognized land management practice for natural resources management and fire protection. The decision to use prescribed burning will be based on the safety hazard involved, the hazard that will develop if burning is not accomplished, the type of natural habitat involved, the impact on the areas total ecosystem, and applicable State and local regulations and coordination with installation fire departments. Installation activities making use of the land (for example, testing, training, maneuvers) will be aware of fire hazards and adjust their programs, including suspension of activities, to avoid high hazard areas and/or periods.

2–18. Management requirements

a. General.

(1) Objectionable plant growth will be controlled through an Integrated Pest Management (IPM) program under the approved Pest Management and Natural Resources Management Plans. It will include techniques which take into consideration land use plans, long term cost effectiveness, threatened and endangered species protection, and other environmental impacts. Standards and techniques such as mowing heights, turf selection, plant growth regulators, grazing, and Environmental Protection Agency (EPA) registered and approved herbicides are among the approaches available. Special precautions will be taken in the application of pesticides to safeguard personnel from contact and prevent contamination of livestock feeding areas, agricultural crops, nontarget water sources, ornamental plants, inhabited areas, and environmentally sensitive sites and habitats.

(2) The MACOM and the installation natural resources and pest management professionals are responsible for the technical supervision and monitoring of the weed control program. The procedures for storage, handling, applying, recording, and reporting pesticides, contained in AR 420–76, apply also to herbicides.

b. Pesticide use.

(1) Use of chemical pesticides for the protection and control of vegetation is permitted when other methods of control are not prudent. Pesticide application and handling will be in accordance with the MACOM approved installation pest management plan and applicable guidance given in AR 200–1, AR 420–76, TM 5–629, TM 5–630, and TM 5–632. Aerial application will also conform to guidance in AR 40–574. All uses of pesticides will be in strict compliance with FIFRA, and a currently approved EPA or State label, unless approved otherwise by the applicable federal regulations. Herbicides are not permitted for use in outdoor childrens play areas at child development centers (refer to AR 608–10). Technical provisions of all proposed contracts for pesticide applications used in vegetative and wildlife management will be reviewed and approved, as appropriate, in writing, by the MACOM natural resources management professional.

(2) All pesticide applicators must be licensed (if a private commercial applicator) and certified by the applicable State or DOD agency. Quality assurance (QA) evaluators must be properly trained to ensure that professional standards, technical requirements, and correct application techniques are adhered to.

(3) All pesticides must be stored in a secure area to prevent possible environmental damage. Specific construction and storage requirements are set forth in Military Handbook MIL–HDB–1028–8A (1 Nov 91).

c. Poisonous and noxious plants. Poisonous plants will be controlled only where they present a health hazard to personnel or possess potential for spreading to adjacent landowners' property adversely affecting safety and operations. Many plants contain poisonous parts or are poisonous during certain stages of growth. Education of personnel to become aware of potential hazards should be accomplished in place of widespread destruction programs. Control of plants designated as noxious by federal or State agencies will be in accordance with environmental policies and in harmony with local community programs and adjacent property owners.

2–19. Coastal zone management

Public Law 92–583, Coastal Zone Management Act, as amended, provides national policy and a program whereby coastal States can develop and establish a Coastal Zone Management Plan. All Federal lands are excluded by the Federal land exclusion provision in the Act and that exclusion encompasses all lands used by the United States without regard to the ownership or the jurisdictional status of the land. However, federal actions in or affecting a coastal zone must, to the maximum extent practicable, be consistent with that coastal States approved Plan. Activities will attempt to ensure that a State's Coastal Zone Management Plan recognizes the existence and impact of all military installations, facilities, and lands, and excludes provisions for mandatory application over same. Commanders will cooperate and coordinate with the Coastal States during all phases of the Coastal Zone Management Plan formulation and implementation. When available, DEH's (or appropriate environmental directorates) are encouraged to utilize, to the extent possible, the coastal engineering expertise of the Corps civil works staff for problems concerning beach erosion or nourishment. Coordination will be accomplished through the Army Coastal State representative (for example, supporting Corps of Engineer District) and will be limited to

necessary unclassified and releasable information such as inventory and mission data, master plans, and the like.

2–20. Beach protection

Protection of beaches on Army land is required to prevent water from flooding shore developments, military installations inland cities, and other improved lands during storms in coastal areas. Natural and/or constructed barriers will be considered as requirements dictate. Permits may also be required from the COE. Contact the district engineer. Plans for barrier construction and for any proposed alterations will be carefully studied by specially qualified experts, (COE coastal engineering expertise is available for assistance in this area). Consideration will be given to requirements of State Coastal Zone Management Plans.

2–21. Wetlands

a. Wetlands are of critical important to the protection and maintenance of living resources, including a significant number of endangered and threatened species, as they provide essential breeding, spawning, nesting, and wintering habitats for a major portion of the nation's fish and wildlife species. Wetlands also protect the quality of surface waters through impeding the erosive forces of moving water and trapping waterborne sediment and associated pollutants, protect regional water supplies by assisting the purification of surface and groundwater resources, maintaining base flow to surface waters through the gradual release of stored flood waters and groundwater, and provide a natural means of flood control and storm damage protection through the absorption and storage of water during high runoff periods.

b. Executive Order 11990 requires that federal agencies minimize any significant action that contributes to the loss or degradation of wetlands and threat action be initiated to enhance their natural value. It is DA policy to avoid adverse impacts to existing aquatic resources and offset those adverse impacts which are unavoidable. Additionally, Army will strive to achieve a goal of no net loss of values and functions to existing wetlands, and permit no overall net loss of wetlands on Army controlled lands. Furthermore, the DA will take a progressive approach towards protecting existing wetlands, rehabilitating degraded wetlands, restoring former wetlands, and creating wetlands in an effort to increase the quality and quantity of the nation's wetlands resource base. To meet this requirement, installations will identify and maintain a current inventory of their wetlands resources. Installations should contribute to and reference the National Wetlands Inventory.

c. Action affecting wetlands will require an environmental analysis in accordance with AR 200–1, AR 200–2, and applicable federal and State laws and regulations. U.S. Army COE permits are required under Section 10 of the Rivers and Harbors Act of 1899 prior to commencing any work or structures built in a navigable water of the United States. Such work includes dredging, bulkheads, piers and docks, and bank protection. Corps permits are required under Section 404 of the Clean Water Act for the discharge of dredged of fill material into a water of the United States, including wetlands. The COE regulations in 33 CFR Parts 320–330 prescribe the statutory authorities and general and special policies and procedures applicable to the review of applications for COE permits. Before commencing any work in a water of the United States, a district engineer must be contacted and a permit obtained, as appropriate.

2–22. Natural resources law enforcement

a. Enforcement of laws primarily aimed at protecting natural resources and outdoor recreation activities are an integral part of the installation's natural resources management program. Game laws must be implemented in accordance with applicable State and Federal laws and as approved by the commander in the Integrated Natural Resources Management Plan.

b. Whenever hunting, fishing, or trapping is allowed on Army installations, enforcement of natural resources laws and regulations will be in accordance with the installation Fish and Wildlife Cooperative Plan and will be performed by Natural Resources Law Enforcement professionals and/or Provost Marshal if practicable, or as required under the SOFA, OCONUS.

2–23. Management records

Installation records and reporting requirements of natural resources management activities will be developed and maintained on an annual (fiscal year) basis. Information maintained will include, as a minimum, that required to develop and implement the Integrated Natural Resources Plan and complete the Army Compliance Tracking System (ACTS) (RCS: DD–P&L(A)1485) (previously required on the Defense Environmental Management Information System (DEMIS)) Guidance on completing the ACTS will be provided annually by HQDA. Questions concerning the preparation of the report will be directed to the U.S. Army Environmental Center (SFIM–AEC). Installations will submit annual work plans as instructed by MACOMs.

2–24. Program evaluations, inspections and technical assistance

a. Appropriate Headquarters, DA, MACOM, and field operating agency commanders will make scheduled and special visits to installations to provide technical assistance and to ensure compliance with applicable environmental standards. Technical reviews and on–site assessments of installation natural resources programs will be conducted at least every 3 years by command natural resources management professionals. Necessary corrective action are to be taken. These programs will be incorporated, when possible in management reviews (that is, staff visits are according to AR 420–10).

b. The Environmental Compliance Assessment System (ECAS) program requires each installation to have an external compliance assessment conducted at least once every four years as a means of achieving, maintaining, and monitoring compliance with applicable Federal, State, and local environmental laws.

c. Information obtained through the ACTS and ECAS programs will be used to evaluate program status, resource requirements, compliance with applicable host nation overseas baseline environmental guidance document, Federal, State, and local environmental laws and regulations, and overall program progress.

2–25. Research and development needs

a. The Army will maintain a Natural Resources R&D program as part of the R&D effort in support of military installations. This program will be funded primarily with R&D funds and may be supplemented by O&M and reimbursable funds.

b. The Environmental Programs Directorate, Conservation Division, is the user community representative to articulate R&D requirements to the R&D community. The Conservation Division will annually integrate all R&D requirements and provide them to the Corps of Engineers (COE) during the annual Natural Resources R&D program review. Coordination with R&D performed by other military departments and agencies (that is Waterways Experiment Station, Construction Engineering Research Laboratory, Cold Region Research and Engineering Laboratory, USDA, USDI, colleges and universities) will be maintained to avoid duplication and provide for utilization of research accomplished by others. Installations and MACOMS will provide prioritized R&D requirements, validated by their appropriate EQCC, to the Army Environmental Center (AEC). The AEC will consolidate these requirements and forward them to the Conservation Division for development of an integrated Army R&D program. R&D program requirements must be articulated.

2–26. Hazardous substance damage to natural resources

If release of a hazardous substance by another party causes environmental damage to natural resources under Army control, that party is potentially liable. While it is the responsibility of the Army to

remediate the hazardous substance, recovery of remediation expenses from the responsible parties may be attempted through legal action.

Chapter 3
Land Management

3–1. Overview

a. Land management operations will be consistent with the latest conservation and land management principles which are continuously applied in an orderly and timely manner. Carrying out national land use and conservation policies is required on all federal lands to the extent practicable and in concert with the assigned mission. Commanders within the continental United States (CONUS) will actively cooperate with local, State, and federal organizations in the carrying out of national land use and conservation policies in accordance with accepted scientific and professional standards and practices.

b. Appropriate decision–makers and commanders at all levels shall be kept informed of the condition of natural resources, the objective of natural resources management plans, and potential or actual conflicts between Army activities and management plans; federal, State, or local laws or regulations; or the policies and procedures herein.

3–2. Mission requirements for land and water

a. The installation commander will plan land utilization with an awareness of the potential environmental effects of proposed actions. Mission requirements for the land will avoid or minimize adverse effects and restore or enhance environmental quality. Actions will be carried out in accordance with the provisions of this AR and AR 200–1, AR 200–2, AR 210–21, and applicable federal, State, and local laws and regulations.

b. The natural resources management professional will be an active participant in all planning and decision–making activities regarding uses of the land to ensure that current and planned mission activities (for example, master planning, construction requests, site approval requests, and training exercise plans) are conducted in a manner which is compatible with natural resources and other environmental requirements. The inventory process, Land Condition Trend Analysis (LCTA), will identify and evaluate the condition and potential trends of wetland, marine, and estuarine land, grasslands, soils, scenic and natural areas, aesthetics, threatened and endangered species habitats, and other sensitive natural resources.

3–3. Inventory and classification

a. The initial step to be taken in the development of a multiple use natural resources management program requires a survey, inventory, and classification of the resources present and their status. The inventory will identify and evaluate the condition and potential trends of wetland, marine, and estuarine areas, fresh water, forest land, grasslands, soils, threatened and endangered species habitat, scenic and natural areas, aesthetics, and any other significant environmental elements. Surveys and inventories, at a minimum, will also identify endangered and threatened species of flora and fauna, federal candidate and State listed species (refer to section 11–11), critical habitat, native ecosystems, and archeological and historic sites. When in–house capability is not adequate to accomplish this task, maximum use should be made of assistance from the MACOM, Corps of Engineers, and cooperating federal, State, and local agencies.

b. In order to provide for comparability and analysis of inventory and status data on an Army–wide basis, the standards of the Army Land Condition–Trend Analysis (LCTA) method will be applied when evaluating and managing Army lands. Standardized data obtained from LCTA application will be used in making land use decisions (for example, integrated natural resource planning, threatened and endangered species management plan development, master planning, realignments, stationing, scheduling), assessing cumulative impacts and determining maintenance requirements.

3–4. Integrated training area management (ITAM)

a. The goal of ITAM is to create a cooperative atmosphere between the military trainers and environmental staff; and ensuring for the current and long term availability of semi–improved and unimproved lands for accomplishment of training and testing objectives in compliance with federal, State, and local standards.

b. ITAM is based on the integration of the military mission, Land Condition Trend Analysis (LCTA) baseline data, Land Rehabilitation and Maintenance (LRAM), and other applicable natural resource programs including forestry and wildlife.

c. Maintaining quality training, testing, and other lands is essential to the military mission. Where appropriate (natural resources and training base warrant it), the Army Integrated Training Area Management (ITAM) Program will be used to provide the framework for managing training, testing, and other lands. Installation ITAM Programs will—

(1) Be staffed with natural resources management professionals and other personnel, as needed, to develop and maintain training, testing and other lands in conditions that result in conditions that support the conduct of realistic and quality military operations.

(2) Include provisions to–

(a) Provide a baseline and monitor trends of training, testing, and other lands using the LCTA methods. Use LCTA data for land use planning, documenting long–term cumulative damage and maintenance programming.

(b) Site military missions according to the capabilities of lands to sustain such uses.

(c) Implement training procedures to minimize long–term cumulative damage to military lands and improve environmental quality.

(d) Enforce training restrictions which protect military lands and environmental quality.

(e) Rehabilitate damaged training lands to the point where they maintain environmental quality standards and support realistic conduct of military operations. In appropriate cases, the use of ITAM will be specified in NEPA documentation as a mitigation measure.

(f) Minimize long–term cumulative damage to training and testing lands using such techniques as training area rotation and scheduling to avoid critical areas and/or critical times of the year.

(g) Educate military personnel in the philosophies and regulations regarding management of training, testing, and other lands, and environmental protection. In addition, training programs must be updated as required to remain current with environmental regulations.

(h) Coordinate land management issues with trainers, testers, and land managers to ensure proper integration of operational requirements into land use recommendations.

d. When it is determined that damage resulted from violation of training area regulations and/or procedures or from unnecessary non–tactical maneuvers and resulted in the requirement for repairs which were not planned or programmed, the military unit responsible for the damage will provide funds for repair and renovation. Damage assessment will be determined through the EOCC and/or joint training/natural resource committee.

e. ITAM methodology will be used to monitor land condition trends and mitigate adverse impacts of the military mission on long term training land viability. This will be identified in appropriate NEPA documentation as a legal requirement.

Chapter 4
Grounds Maintenance

4–1. Standards for ground maintenance

a. Grounds will be maintained at the levels and intensities necessary to meet the designated use criteria, protect, and enhance the natural resources, and ensure a pleasing appearance in harmony with

the natural landscape. Designated turf areas will be maintained (renovated, seeded, aerated, fertilized, and irrigated) to the degree required to maintain a permanent vegetative cover of desirable plants necessary to support the intended use. Guidance available from local agricultural agencies and universities will be used in determining the most adapted species of vegetation and the maintenance practices necessary to meet the designated use. Improved grounds will be maintained at a level comparable with similar public facilities in the area. The Army Community of Excellence (ACOE) and self–help programs are to be an integral and active force in grounds maintenance/landscape improvements and installation beautification initiatives. The appropriate environmental directorate is to provide technical guidance and approved materials to all interested occupants, building managers, tenants, as well as other personnel interested in improving their living and working areas on the installation.

b. Costs for maintaining grounds will be minimized by providing the least amount of mowed area and landscape plantings necessary to accomplish management objectives and by the use of low maintenance species, agricultural leases, reforestation, natural areas, and wildlife habitat. Standards for maintenance of all categories of grounds will comply with TM 5–630.

4–2. Grounds maintenance requirements

a. Government owned facilities. Except as specified in (1) and (2) below, grounds maintenance services are facilities engineering requirements:

(1) *Fami1y housing.* See AR 210–50 for command and occupant requirements for Government owned family quarters.

(2) *Bachelor housing.*

(a) Separate lawns. For Government owned quarters having separate lawns (for example, separate dwellings or side–by–side duplexes), occupants will mow lawns with power or hand–pushed mowers, irrigate lawns and shrubs, cultivate shrubs, edge adjacent to paved surfaces and flower or shrub beds, and remove leaves, paper, bottles, stones and other litter. Boundaries should be established which clearly delineate the extent of grounds assigned to each occupant for use and maintenance. Boundaries will correspond to the limits of the logical yard of each dwelling but normally will be not more than 50 feet from the dwelling. Grounds maintenance outside these boundaries may be performed by the installation. (For"Self–Help Program" criteria, see AR 420–22.)

(b) Communal lawns. For other Government owned housing having lawns common to more than one occupant (for example, barracks, Bachelor Officers' Quarters (BOQs) and apartments), occupants will perform grounds maintenance services as in (a) above. If impracticable, these services will be performed as a facilities engineering activity.

b. Leased facilities. Except as specified in (1) and (2) below, grounds maintenance services are lessor and lessee functions.

(1) *Family housing leases.* See AR 210–50 for command and occupant responsibility for leased quarters.

(2) *Other leases in the United States.*

(a) Separate lawns. For Government leased housing and quarters having separate lawns, (for example, separate dwelling or side–by–side duplexes), occupants will perform grounds maintenance services as set forth in a(2)(a) above, using tools furnished by the Government.

(b) Communal lawns. For other Government leased housing having lawns common to more than one occupant (for example, BOQs and apartments), lease instruments will delineate lessee and Government functions.

(3) *Other leases in overseas areas.* Requirements for grounds maintenance of Government leased housing facilities will be predicated upon the customs and practices of the country; lease instruments will specifically delineate lessor and U.S. Government functions.

c. Recreational facilities. For information on recreational facilities, see paragraph 7–3.

4–3. Cemeteries

The installation commander has jurisdiction over post, private, and prisoner–of–war cemeteries located on Army installations, and maintains and operates as follows:

a. At active installations.

(1) *Post cemeteries.* (See AR 210–190).

(a) Standards of maintenance will be equal to those authorized for other intensively maintained grounds. Areas will be protected as required by fencing, and will be kept orderly. Care will be taken to prevent damage to monuments, markers, and headstones. These will be kept clean and will be reset and realigned when necessary.

(b) As required, graves will be opened and closed, temporary headboards provided and placed, and permanent headstones set.

(2) *Private cemeteries.* It is DA policy to acquire title to all private cemeteries within boundaries of installations owned in fee by the United States. For the purpose of this regulation, a private cemetery is any cemetery or burial plot on the installation which, regardless of present ownership, was initially owned by a person or agency other than the United States.

(a) When the deed of conveyance is silent with respect to maintenance or access to a private cemetery, or separate agreements with private parties have not been made, the installation commander will oversee maintenance, as follows: Excessive shrubs and trees will be removed; fencing for protection when required; headstones destroyed or seriously damaged by military activity will be replaced; and grounds will be kept clean and orderly. Public access will be allowed when consistent with safety and military security.

(b) When the deed of conveyance or separate agreement with private parties requires the United States to provide maintenance or access, standards of maintenance in (a) above apply.

(3) *Prisoner–of–war cemeteries.* Standards of maintenance in (2)(a) above apply.

b. At inactive installations. For the three types above, minimum standards of maintenance apply. Included is a periodic mowing, removal of brush, repair of fences, and resetting of headstones and markers, as required to maintain a neat appearance. These standards will also apply to cemeteries that remain after real estate disposal action has been completed for the remainder of the installation.

c. Pet cemeteries. Maintenance of pet cemeteries is not a facilities engineering responsibility. No new pet cemeteries will be established. Appropriated funds will not be used to maintain established pet cemeteries. Neglected pet cemeteries will have markers removed and be maintained by the facilities engineer at a level equivalent to the surrounding area.

4–4. Gardens

Preparation (plowing, harrowing, and discing) of a community type garden in excess of one quarter acre in size may be performed as a facilities engineering function. Preparation of smaller garden plots and the cultivation, maintenance, harvesting, and clean–up of vegetable and/or flower gardens will not be accomplished as a facilities engineering responsibility.

4–5. Greenhouses and lathhouses

a. The maintenance of greenhouses and lathhouses designated by The Surgeon General for therapeutic purposes, and by the Provost Marshal General for vocational training purposes at U.S. disciplinary barracks, is a facilities engineering activity (including the provision of utilities necessary for operation). Furnishing of operating personnel (including supervisory) is the responsibility of the using activity.

b. Appropriated funds will be used for maintenance and operational support of only those greenhouses and lathhouses "designated as set forth in a above."

4–6. Irrigation

a. Irrigation will be limited to areas where it is essential to establish and maintain required vegetation or when an agricultural out–lease contract requires it. Lessees using installation water supplies will be charged for water and electrical power to pumps.

b. Installations in arid areas will not use irrigation to create environments to grow non–arid plants. Arid and semi–arid installations will make maximum use of desert and low moisture (xeric) requiring landscape materials. Irrigation in arid areas will, at most, be limited to selected high visibility areas or where required to maintain vegetative cover to meet the designated use (such as golf course greens).

c. Installations will cooperate with and comply with state and local water conservation initiatives and restrictions which are mutually beneficial and which will not have a detrimental impact on the military mission.

d. A water conservation plan will be included in the natural resources management plan at installations where irrigation is practiced.

4–7. Nurseries

Expenditure of appropriated funds is not authorized for the operation of commercial plant nurseries. Trees and shrubs will be obtained from commercial nurseries and federal and state agencies when available. If economical, and in compliance with the Integrated Natural Resource Management Plan and the Installation Master Plan, trees and shrubs from planted as well as natural areas may be used providing they can be transplanted with sufficient roots and soil to meet American Association of Nurseryman Standards (ANSIZ60), and that the site and associated biological resources will not be adversely impacted.

4–8. Landscape plantings

a. All planting, pruning, cultivation, and other maintenance will conform to criteria in TM 5–630, ANSIZ60 standards, and the approved Installation Design Guide.

b. Trees and shrubs will be removed if they have become terminally plagued by insect or disease problems, high maintenance costs, health or safety hazard to persons or property, or have become non–complementary to architectural features of the building area.

c. Justification and merits for landscape and urban forestry expenditures in the urban ecosystem include: energy conservation, preservation of historic and specimen trees, grounds maintenance cost savings, beautification and increased property values, increased species and habitat biodiversity, improved living and working conditions, soil conservation, enhancement of water supplies, control of runoff and nonpoint sources of pollution, and good land stewardship.

d. Landscaping will be functional in nature, simple and informal in design, meet professional standards for species, design and installation; be compatible with adjacent surroundings, and complementary to the architectural features and the overall natural setting of the area. Formal landscape designs will be limited to specific high visibility areas including main building and road entrances, ceremonial areas, and other special use sites as warranted. Emphasis will be on the use of low maintenance indigenous plants. Normally not more than one–fourth of an individual foundation perimeter will be planted with shrubs or trees. In arid and semi–arid areas, use water efficient (xeric) plants. A viable Landscape Planting Plan will be an integral part of the Integrated Natural Resources Management Plan Installation Design Guide under the Master Plan.

e. The expenditure of appropriated funds for shearing hedges and ornamental plants into formal or decorative designs is not authorized except as specifically prescribed in the approved planting plan.

f. Climbing vines, shrubs, and trees which block or damage windows, eaves, gutters or other construction components will be pruned or eliminated, whichever is most feasible.

g. Plantings which reduce visibility or otherwise constitute a traffic hazard near street intersections, walks, and drives will not be permitted.

h. All landscape plantings will be compatible with other grounds maintenance requirements and will be coordinated with, reviewed, and approved by the Facility Engineer, Master Planning, utilities, and the natural resource manager. Painting or white–washing of tree trunks and stones is not authorized.

i. Planting and maintenance of flower beds, rose gardens, and nut or fruit trees for their edible products, except for wildlife food purposes, are not facilities engineering duties except as provided below. When flower beds are an important cultural landscape feature of the community, they may be planted and maintained as a facilities engineering activity but should be limited to the main entrance to the installation, headquarters, or in areas used for ceremonial purposes. When authorized, flower beds will be laid out in accordance with a planting and maintenance plan to ensure that–

(1) Costs are minimized by an appropriate mixture of perennials, annuals, and indigenous wildflowers.

(2) Plant materials are compatible with the site, exposure, and growing zone; and that exotic species or plant materials that serve as an attractant or host to pests are not used.

(3) Acquisition and/or maintenance costs are reasonable.

(4) Indigenous and cultivatable threatened and endangered species are to be given primary consideration.

j. Landscape plans and actions in significant historic sites or districts will be reviewed for their potential effect according to AR 420–40, chapter 3.

4–9. Urban forest management

a. The integrated urban forest ecosystem encompasses many environments, disciplines, and concepts. This includes open lands, water, and vegetated areas in and adjacent to improved and semi-improved grounds as well as woodland borders. The urban forest includes individual trees as well as groupings and small tracts scattered among more dominant land uses. Multiple use of this resource must occur within and among this complex system of interspersed land uses. Urban forests are valued primarily for their non–consumptive contributions to our everyday lives and the environment in which we live. see Landscape Plantings, chapter 4, paragraph 4–8c. Wood products and volumes from an urban tree are usually identified only for salvage operations.

b. An Urban Forest Management Plan will be an integral part of and integrated with the Installation Master Plan, and the natural resource management plan. The plan should include professional standards (National Arborist Association, American Association of Nurseryman "American Standard for Nursery Stock", Council of Tree and Landscape Appraisors "Guide for Plant Appraisal"), technical specifications, training, certification, and requirements for all actions impacting the planting, growth, and survival of all trees in the urban forest ecosystem. This includes specific standards for planting, pruning, fertilizing, removal, utility clearance, and integrated pest management; the identification, protection, and preservation of historic and specimen trees, and the training, licensing and certification of personnel and contractors.

c. All applicable installations with a land management program will have a Command Tree Policy Directive and/or Tree Ordinance that identifies and provides specific requirements, authorization, and approvals for excavation permits, tree removals, and liabilities for unauthorized tree removal and damage.

4–10. Installation aesthetics and the Army Communities of Excellence Program

a. The Army Communities of Excellence (ACOE) program is designed to bring together, under a central umbrella, all those programs and components that directly impact on life in Army communities. Its goal is to help the garrison commander focus on an integrated plan for improving the community. Tools and guidelines for developing stronger Army communities can be found in DA Pam 600 45, "Guidelines for Community Excellence." Specific installation guidelines and instructions are to be issued by the appropriate directorate. The Army must be supported by both excellent "services" and excellent "facilities."

b. An essential part of any outstanding Army community is the excellence of its facilities. Such facilities are a strong reflection of the whole community's pride and achievements. There are a number of elements in the ACOE program that are considered essential to a

good facilities beautification program. They allow standards to be set and determinations of facility excellence to be made. These elements include the Installation Design Guide, the self–help program, building exteriors, signage, screening and the reduction of visual clutter, landscaping and grounds maintenance, lighting, and the design and placement of roads and utilities.

c. The Installation Design Guide (IDG) is an essential tool in the planning process (see TM 5–803–5, Installation Design, for general guidance). The IDG is to provide specific guidelines and information to improve the aesthetics of the installation. This includes site planning for parking, signs, lighting, and utilities, list of plants appropriate for planting at specific installation sites, and standards for the planting, maintenance, and protection of trees, shrubs, groundcovers, and turf. All new construction projects are to include provisions for landscaping and aesthetics with appropriate landscape design and funding authorization. This will include landscaping, buffer zones, screening, parks, and recreational areas as appropriate. Commanders will include the resources essential to support base attractiveness in budget estimates, project estimates, and other resource justifications.

d. While the design guide is a good and necessary start to facility excellence, an active self–help program is one of the most vital elements for implementation and success. Individuals of the community take self pride in improving their living and working areas. The individual, building, or community provides the labor while the appropriate installation directorate provides the tools, materials, and technical guidance.

e. The ACOE and self–help program initiatives provide a means to enhance the aesthetics of the installation, provides an opportunity for all personnel to improve their living and working areas, reduces maintenances costs, and increases the overall value of the Army's physical establishment. The appropriate facility directorate will implement and encourage residents and employees to participate in a self–help grounds maintenance improvement program. The appropriate directorate will provide guidance, specific instructions, and approved materials for self–help projects which contribute to grounds maintenance cost savings, increased installation attractiveness, and good community relations. Special days (Arbor Day, Earth Day, and so forth.) should be designated to promote annual self–help awareness and participation. Both day–to–day type operations and maintenance and project type work will be performed in a way to enhance installation aesthetics. Consideration should be given to the protection of areas which have special scenic values. Areas with archaeological, geological, historical, or ecological significance must be protected.

Chapter 5
Forest Management

5–1. Overview

a. The Army forest management program is required to support and enhance the immediate and long term military mission and meet natural resource stewardship requirements set forth in federal laws. Forest ecosystems perform important, sometimes unique, natural resource functions in which we inheritantly value, and which are of benefit to all living things. The objectives and benefits of forest ecosystem management include; biodiversity of species and habitat; natural beauty; outdoor recreation opportunities; wildlife habitat, including habitat for threatened and endangered species of plants and animals; soil conservation and watershed protection, including erosion control; improvement of air and water quality; sustained production of commercially valuable forest products; noise abatement; and the sustainment of viable and diversified training lands to meet the military mission.

b. It is Department of the Army policy to maintain, restore, and manage its forest lands on a ecosystem basis. The harvesting of forest products, including other consumptive and non–consumptive activities that take advantage of the forest environment, are allowed and encouraged when conducted consistent with protecting and maintaining a viable, self–sustaining forest ecosystem. Consistent with the guidance set forth in section 5–4, revenues generated from the commercial harvesting of forest products will be used to maintain, improve, and, as necessary, restore previously degraded forest ecosystems on Army installations. Forest ecosystem management strategies should be broad–based to optimize overall natural resources benefits, and not focused on a single management objective, for example, maximizing timber production. Forest ecology and management are to be an integral part of the master planning process and review. Forest ecosystem management activities may, when pertinent, include the following:

(1) *Silviculture.* The major objective of the Army's silvicultural program is to promote a healthy ecosystem capable of supporting mission and conservation requirements. Silviculture treatments will be designed to restore, maintain, and improve the ecological functions and values of the particular forest unit being managed. Silvicultural treatments used on army lands will be designed to improve military mission areas, and when possible, attain multiple use and sustained yield timber management while enhancing watersheds, wildlife habitats, and natural beauty values along scenic corridors. When silvicultural treatments provide opportunity for commercial sale of forest products, each commercial forest activity will be performed in accordance with 10 USC 2665 and operating expenses will be commensurate with anticipated financial returns.

(2) *Laws and regulations.* Biological laws, regulations, and guidance that must be complied with when performing forest management includes but are not limited to endangered species management guidelines (ESMG) (refer to paragraph 11–6); " Policy and Management Guidelines for Red–cockaded Woodpeckers on Army Lands", as revised; The Endangered Species Act of 1973, as amended; NEPA; AR 200–1, AR 200–2, and AR 420–40. See chapter 11 and appendix C for additional guidance and for a more complete listing of laws pertaining to forest management on Army lands.

(3) *Protection.* Protection of natural resources on an Army installation, to include forests, is the task of the installation commander using appropriated funds. All operational costs incurred to fight forest fires occurring as results of military activities, unknown causes, or on unimproved grounds areas will be charged to the O&M appropriated Army Management Structure (AMS) codes, the military unit causing the fire, or a combination of both. An example of a proper charges to the forestry account (AMS 423012.26) would be operational costs to fight fires caused by loggers during a logging operation or the use of controlled fire by in–house forces to accomplish a silviculture forest management activity. Protection of Army's forests from fires will be done by assigned personnel trained and equipped to control forest fires. Assistance will be obtained, as needed, from local agencies and will be done in accordance with existing cooperative agreements.

(4) *Coordination.* Planned forest management activities such as timber harvest, reforestation, and timber stand improvement will be coordinated with and reviewed by all other staff resource professionals (wildlife biologists, fisheries biologists, archaeologists and so forth) to protect and improve other resource values; and with training, testing, and other operational personnel to ensure the planned activity supports the planned military use of the land.

5–2. Timber management

a. Inventories. Volume inventories of forest stands will be made and kept current (not older than ten years) to provide for sustained production of forest products. Volume inventories are an integral part of the installation's forest management plan. Inventory systems will be of an intensity that is appropriate for the volume and value of the forest resources, and the level of management capable of being practiced.

b. Harvesting actions.

(1) *Approval authority.*

(a) The MACOM will review and approve, as appropriate, timber declared available for harvest that are not within the installation commander's authority. Prerequisite for timber harvest availability

is a current and approved Forest Management Plan and environmental documentation as applicable under NEPA and federal, State, and local environmental compliance standards.

(b) The level of NEPA documentation required for a proposed action is to be determined from the Baseline Data and a Biological Assessment or Evaluation. The Natural Resources Management Plan (including the Forest Management section) is to be integrated with the Installation Master Plan EA/EIS. An EA is normally required for commercial timber sales and harvests. Based on NEPA policies and procedures, some actions do not individually or cumulatively have a significant impact on the environment, and therefore, may be Categorically Excluded (CX) from an EA or EIS documentation. CX's may include the salvaging of wood products from dead and dying trees, trees that are designated to be removed based on approved construction and applicable EA or EIS, thinning of young overstocked timber stands, or timber stand and/or wildlife habitat improvement activities which do not include the use of pesticides. A Record of Environmental Consideration (REC) is required for each CX. The NEPA evaluation process must be adhered to for all proposed actions. Refer to AR 200–2.

(c) Installation commanders are authorized to sell small volumes of forest products in conformity with AR 405–90. This includes standing timber, products remaining after harvest and/or forest management operations (for example, tops, fuelwood, Christmas trees, greens); and dead, dying, damaged or fallen trees resulting from fire, construction, insect and disease or storms, according to the Integrated Natural Resource Management Plan.

(2) *Disposal action.*

(a) Installation commanders will submit, when appropriate, an annual report of availability to the MACOM during the current FY for all timber planned for disposal during the upcoming FY. See DA Pam 420–7 for preparation of reports of availability.

(b) The MACOM will review and take appropriate action as recorded in (1)(a) above and submit approved reports of availability to the appropriate Corps of Engineer Division for disposal action. See AR 405–90.

(c) In addition to b(l)(c) above, small volumes of timber may be sold for the installation by the Defense Reutilization and Marketing Officer or the District Engineer. See AR 405–90. Proceeds from all Army timber and forest product sales will be deposited to Deposit Fund Account 21F3875.3960 20–C S99999. Additional guidance on sales by installation commanders is contained in DA Pam 420–7.

(d) Commercial forest products will not be given away, abandoned, carelessly destroyed, used to offset costs of contracts, or traded for products, supplies, or services. All forest products are to be accounted for and commercial harvests completed prior to the start of any construction that may impact forest resources. When forest products are removed from Army lands by any means other than a commercial timber sale, a dollar amount equal to the fair market value is to be deposited to Budget Clearing Account 21F3875.3960 20–C S99999 for products removed. Forest products may be used on the installation for training purposes without credit to the forestry account. Records of such actions are to be maintained and reported annually on the Army Compliance Tracking System (ACTS) (previously required on the Defense Environmental Management System (DEMIS)).

(e) Forest products may be harvested to generate electricity or heat provided a dollar amount equal to the fair market value is deposited to Budget Clearing Account 21F3875.3960 20–C S99999 and the installation's program where the timber was harvested is credited with the income. The approved Integrated Natural Resources Management Plan, Forest Management Section, should note that installation forest products may be harvested for the purpose of generating electricity or heat on the installation and a record of such action is maintained by the DEH.

(f) Approved timber sales will continue on land reported as excess until land transfer occurs. Clear–cuts on Army forest areas are prohibited unless approved for a specific management purpose. Thinnings, intermediate harvests, and salvage cuts are to be continued if the actions are described and planned in the approved Integrated Natural Resources Management Plan. That portion of the proceeds from sales of land that is attributable to the value of standing timber on the land sold will be deposited to Budget Clearing Account 21F3875.3960 20–C S99999.

(3) Installation sawmill and the logging operations incident thereto are not authorized except–

(a) To the degree required to train troops in specialized construction activities.

(b) When necessary to prevent the compromise of security information

5–3. Forest pest control

a. Refer to the installations Integrated Pest Management and Forest Management Plans for major pest problems and recommended controls.

b. Section 5 of the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2101) authorizes the Secretary of Agriculture to protect trees and forests, wood products, stored wood and wood in use from insects and diseases. The Forest Service has the delegated responsibility for carrying out the provisions of the Cooperative Forestry Assistance Act on National Forest Service lands and in cooperation with other Federal land managing agencies, the States and private land owners on other forest lands. It is intended that the USDA Forest Service will provide technical assistance and appropriate funds to meet specific pest management project objectives as follows:

(1) Provide foliage protection.

(2) Reduce specific insect and disease populations.

(3) Reduce the risk of artificial spread to uninfested areas.

(4) Prevent tree mortality.

c. A Memorandum of Agreement between the United States Department of Agriculture (USDA) and the United States Department of Defense was signed on 11 December 1990 for the Conduct Of Forest Insect And Disease Suppression On Lands Administered By The U.S. Department Of Defense. Installations should have a written Interagency Agreement with the USDA Forest Service for specific cooperative assistance programs. The agreement should identify the project and acknowledge that the Forest Service will provide technical assistance including population monitoring, surveys, biological evaluations, trends and projected damage, with consideration of environmental and economic impacts.

d. Annual appropriations under the Cooperative Forestry Assistance Act and the Memorandum of Agreement will be based on estimated suppression costs developed by the Forest Service, the Department of Defense, other Federal agencies, States and other cooperating entities. Milestones for forest pest suppression projects are as follows:

(1) April–Headquarters Natural Resources and/or Pest Management Professionals (NR/PMPs) to inform MAJCOM/EFD/District Offices of the technical assistance available from the USDA Forest Service Regional Offices and to request from installations under them a list of proposed forest pest suppression projects for funding under the MOA.

(2) September–Headquarters NR/PMPs receive submissions of project accomplishments for the previous fiscal year and lists of forest pest suppression projects for the next fiscal year from MAJCOM/EFD/District Offices.

(3) October 15–Headquarters NR/PMPs submit lists of previous year project accomplishments and prioritized projects for the next fiscal year to the Executive Director, AFPMB.

(4) November 15–Executive Director, AFPMB submits lists of projects as formal requests to the chief of the USDA Forest Service.

(5) November 30–DoD USDA Forest Service determines which forest pest suppression projects will be funded using Forest Service appropriations.

5–4. Funding

a. Financial support. The Army Forest Management Program begins each FY with zero dollars in its operating account. Until

receipts from sales accumulate in the Budget Clearing Account 21F3875.3960 20–C S99999, installation forest management costs are normally charged to the installation's operation and maintenance account. Forest management financial support may be derived from either automatic reimbursement from proceeds of sales or direct appropriated funds. Appropriated O&M and other funds may be expended for forestry activities. Only expenses that are directly related to the management of the forest ecosystem may be reimbursed from sale receipts and include: timber management, reforestation (to include enhancements, tactical island and tactical corridor plantings), timber stand improvement, inventories, fire protection, construction and maintenance of timber area access roads, purchase of forestry equipment and supplies, disease and insect control, planning (to include actions necessary to maintain forestry compliance with applicable laws and regulations), timber marking, inspections, sales preparation, training of personnel, and timber sales (see USAFAC Letter of Instruction, "Accounting and Reporting Procedures for Production and Sale of Forest Products," March 1991).

b. AMS Code 423012.26. Expenses of commercial forestry activities performed on Army installations will be commensurate with projected financial returns. Such expenses may be distributed to AR 37–100–series account code 423012.26, "Maintenance of Forest Areas." Budget estimates of requirements for 423012.26 reimbursable funds will be submitted annually according to instructions provided by HQDA, Directorate of Environmental Programs, ACSIM. ACSIM will provide the Secretary of the Army Financial Management with MACOM reimbursement budget authority guidance based on fund requirements and anticipated proceeds. Command and installation budget documents pertaining to this account will be coordinated with appropriate natural resources management personnel.

c. Equipment purchases. A prioritized list for the use of reimbursable funds (423012.26) for TDA authorized equipment and minor construction projects (requirements over the expenses/investment threshold), used exclusively in forest management will be submitted through the appropriate MACOM to HQDA, Directorate of Environmental Programs, ATTN: DAIM–ED–N, 600 Army Pentagon, Washington, DC 20310–0600, for review and approval. All requests will include description of the equipment, national stock number, if available, the item cost, purpose of the equipment, and justification for purchase. When approval is granted an installation to procure equipment with forestry receipts costing in excess of the expense/investment threshold, a Military Interdepartmental Purchase Request (MIPR) citing the timber receipt account will be furnished to the installation. The installation will forward the approved equipment request and MIPR to the appropriate major end item manager (Tank Command (TACOM)) for processing and procurement action (see USAFAC Letter of Instruction, "Accounting and Reporting Procedures for Production and Sale of Forest Products", March 1991).

d. Additional guidance. Guidance relating to management, declaration of timber availability, staffing, and other information and guidance on budgeting and financing, including the annual work plan, is contained in DA Pam 420–7 and TM 5–631.

5–5. Other than Army land

Army use and management of lands in the National Forest System, withdrawn Public Domain, and/or lands leased by the Army will be treated according to acquisition and/or lease documents or any existing cooperative agreements that may be in effect.

Chapter 6
Fish and Wildlife Management

6–1. Fish and wildlife management requirements

a. The Fish and Wildlife Management program will provide for the management of fish and wildlife populations and their habitats consistent with accepted scientific principles, in compliance with the Endangered Species Act and other applicable laws and regulations, and in harmony with the total natural resources program. Emphasis will be placed on the maintenance and restoration of habitat favorable to the production of indigenous fish and wildlife, particularly federally listed species protected under the Endangered Species Act, as amended. See chapter 11 for additional information on Army policy and guidance concerning the protection of threatened and endangered species.

b. Lands and waters suitable for conservation of fish and wildlife resources will be managed to conserve wildlife resources. Nongame as well as game species will be considered when planning activities.

c. The suitability and requirement of a military installation for fish and wildlife management will be determined by the installation and the MACOM after consulting with the FWS and host State. Each installation will be classified as one of the following:

(1) Category I—Installations with adequate acreage of land and water resources suitable for fish and wildlife management. Each Category I installation will maintain an up to date fish and wildlife cooperative plan according to this regulation.

(2) Category II—Installations that lack adequate land and water resources for feasible fish and wildlife management. These installations may develop a limited management plan (non–consumptive, preservation, habitat protection, and so forth) based on installation resources and management objectives.

d. Installation commanders with fish and wildlife management requirements will—

(1) Program for funds to conduct an effective program pursuant to the Fish and Wildlife Cooperative Plan required by the Sikes Act.

(2) Require the optimum use and staffing of professionally trained personnel (for example, wildlife biologist) at installations having fish and wildlife management requirements.

(3) Authorize and control fish and wildlife related activities in conformance with applicable federal and State laws, Army regulations, and the installation Fish and Wildlife Cooperative Plan.

(4) Establish a fish and wildlife law enforcement program per paragraph 3–20 to address the requirements of the Fish and Wildlife Cooperative Plan.

6–2. Authority to hunt, fish and trap

a. Hunting, fishing, and trapping may be permitted within the current huntable population levels and carrying capacity of specific wildlife habitats. The number of users of fish and wildlife resources may be limited on a daily or seasonal basis. Membership in an organization, including rod and gun clubs, will not be a prerequisite for or get priority in receiving permits or authorization to hunt, fish, or trap on Army installations.

b. All hunting, fishing, or trapping on a military installation under the control of the Department of the Army will be in accordance with applicable federal, State, host nation, or territory laws and regulations. (10 USC 2671).

c. There will be no hunting, fishing, or other recreational activities in officially designated and marked impact areas and associated buffer zones. Impact areas that have been permanently or temporarily closed may be opened to hunting and fishing only after approval from' the Installation Range and Safety Officers. The Range, Safety, and Natural Resource Offices will determine recreational use boundaries (pursuant to the Integrated Natural Resource Management Plan) that are adjacent to impact areas.

d. Any individual eligible to hunt, fish, or trap on a military installation must obtain–

(1) A license from the State in which the installation is located except as provided for in paragraph 6–3a(2).

(2) A special State permit (16 USC 670a) from the commander of said installation, or his designee, when such permits are required.

e. Whoever violates a requirement prescribed under subsections b, or c, above is liable of an offense under 10 USC 2671(c).

6–3. Installation permits and fees

a. Special installation State hunting, fishing, and trapping permits.

(1) Installation commanders may issue special installation permits to an individual only when same is in possession of a valid

State or territorial hunting, fishing, or trapping license, as applicable except as set forth in subsection (2) below.

(2) An exception to the license requirement can be made when State laws do not grant equality of treatment to military personnel by not waiving residency requirements as specified in 10 USC 2671. Commanders will make written applications to USA Directorate of Environmental Programs, Conservation Division through appropriate channels, for approval to issue permits for military personnel to hunt, fish, or trap on the installation without securing an appropriate State, host nation, or territory license.

b. Fees. The annual demand for operation and maintenance funds frequently has a negative effect on installation efforts to fulfill obligations to foster sound fish and wildlife management programs. As a consequence, other fund sources must be considered. Pursuant to 16 USC 670a–f, installation commanders will—

(1) Establish fees for hunting, fishing, or trapping.

(a) Such fees are to be used on the installation from which collected for the protection, conservation, and management of fish and wildlife, including habitat restoration and improvement, biologist staff and support costs, and related activities, as stipulated in the Fish and Wildlife Cooperative Plan, but for no other purpose. Funds that are required to support hunting and fishing fee collection administration (that is, printing and issuing of permits) will not exceed 10 percent of the annual revenues from hunting, fishing, and trapping fees. Management of this source of funds will be the responsibility of the installations natural resources management professional.

(b) All fees collected will be accounted for in accordance with guidance provided for the appropriation titled "Wildlife Conservation, Military Reservations," Army account 21X5095 (AR 37–100 and AR 37–108). Unobligated balances will be accumulated with current fee collections, and the total amount accumulated at an installation will be available for obligation as apportioned by the office of Management and Budget. Budget and support information, required to obtain obligation authorities, will be provided annually (Army Budget for Wildlife Fish and Game Conservation, Military Reservations, Report (RCS: ENG–303)) in accordance with instructions provided by USA, COE, ATTN: CERM–B, WASH DC 20314–1000.

(2) Issue special installation permits subject to the following criteria:

(a) Persons holding hunting, fishing, or trapping permits will stand at par with each other for use privileges, except that participation will be within manageable quotas and within the capability of the natural resources to support such use.

(b) The same fee will be charged for a particular use to all users at a particular installation except senior citizens, children under a specified age, and the physically handicapped. Fees will be commensurate with program costs, State and local fees for similar activities and facilities, and resources available for use. Exceptions to this must be submitted through command channels to USA Directorate of Environmental Programs, Conservation Division, ATTN: DAIM–ED–N, 600 Army Pentagon, Washington, DC 20310–0600, for approval by the Office of the Secretary of the Army.

(3) Ensure that the Fish and Wildlife Cooperative Plan, as outlined in 16 USC670b, specifies that the possession of a special installation permit will not relieve the permittee of the requirements of other Federal laws, (for example, Migratory Bird Treaty Act, Lacey Act), nor of the requirements pertaining to State laws as set forth in 10 USC 2671.

c. Funds collected pursuant to the Sikes Act (account 21X5095) may be used only to defray the costs of fish and wildlife management programs. The quality of hunting and fishing opportunities are usually in direct relationship with the effort expended for habitat protection and improvement and will receive primary emphasis when developing annual work plans to implement the Fish and Wildlife Management program. Funds collected for hunting and fishing permits will not be used for construction of recreational structures (for example, blinds, deer stands, fishing piers, and so on) or for transportation of hunters to designated stations, unless the only means of participation is by transportation which is required to reach the hunting and/or fishing areas. Such facilities are primarily for recreational use and, therefore, should be funded from the installation Morale, Welfare, and Recreation (MWR) account.

d. A separate community recreation hunting and fishing activity fee, not accounted for as Sikes Act hunting and fishing permit fees (16 USC 670a), may be charged to users of optional hunting and fishing services. These fees should be used for items not authorized in c above (for example, prizes for fishing rodeos, use of blinds or fishing piers only when they are not a requirement to hunt or fish on the installation, rental of hunting and/or fishing equipment, and so on). All recreation hunting and fishing activity generated from these recreational activity fees will be deposited to the installation morale, welfare, and recreation (MWR) fund.

6–4. Fish and Wildlife Cooperative Plan

a. In accordance with 16 USC 670a, the Fish and Wildlife Cooperative Plan is that component of the Integrated Natural Resources Management Plan that describes how the fish and wildlife resources at an installation will be managed. It is a tripartite agreement between the installation, the FWS, and the appropriate State agency designated by the State in which the installation is located. The cooperative plan provides a program of planning for, and the development, maintenance, and coordination of wildlife, fish, and game conservation. It will include Endangered Species Management Plans (ESMPs) for listed and proposed species and critical habitats present on the installation including areas used by tenant organizations (refer to chapter 11 for specific requirements). Each Fish and Wildlife Cooperative Plan (Part IV) will provide for, but not be limited to—

(1) Fish and wildlife habitat improvements or modifications.

(2) Wildlife considerations in all range rehabilitation.

(3) Control of off road vehicle traffic.

(4) ESMPs for listed and proposed species and critical habitat including specific habitat improvement projects and related activities.

(5) Use and protection of fish and wildlife resources, to include both consumptive and non–consumptive use, and natural resources law enforcement requirements.

(6) Designated responsibilities for the control and disposal of feral animals.

b. A cooperative plan will be adopted by an installation commander only after ensuring its compatibility with the rest of the Integrated Natural Resources Management Plan, the Endangered Species Act and other applicable federal, State, and local laws and regulations. Agreement by all three parties regarding the fish and wildlife management plan for an installation makes that plan a cooperative plan pursuant to 16 USC 670a and the exclusive fish and wildlife component of the Integrated Natural Resources Management Plan.

c. Cooperative plans will be reviewed and updated annually to incorporate new findings, including newly approved ESMP's and changes as specified in chapter 11 and revised at least every 5 years.

6–5. Introduction of new or exotic species

All proposed introduction or reintroduction of wildlife species will be thoroughly assessed in accordance with the National Environmental Policy Act and associated FWS requirements to determine the impact on existing flora and fauna and the installation mission. Introduction of species of fish and wildlife foreign or native to the United States or reintroduction of formerly indigenous species will be accomplished only upon the approval of the FWS, the State, the MACOM, and HQDA (USA Directorate of Environmental Programs, Conservation Division, DAIM–ED–N), and will be made a part of the installation Fish and Wildlife Cooperative Plan. See paragraph 11–14 for additional guidance on the introduction and reintroduction of federal and State listed, proposed, and candidate species on Army lands.

6–6. Population management

Wildlife populations will be managed in accordance with the management objectives set forth in the installation Fish and Wildlife

Cooperative Plan. Wildlife population management objectives will include, as a minimum:

a. Conserve, protect, and enhance threatened and endangered species and their habitats.

b. Maintenance of healthy, sustainable wildlife populations within the carrying capacity of the installation's habitat.

c. Prevention of health and safety hazards.

d. Provision for wildlife related recreation.

e. Animal damage control.

6–7. Habitat management

Habitat management efforts will be accomplished in a manner to conserve and enhance existing flora and fauna consistent with the Army goal to conserve, protect, and sustain biological diversity while supporting the accomplishment of the military mission. Activities will be directed towards management to maintain healthy ecosystems, and to restore degraded ecosystems to their historic functions and values. Primary management consideration will be given to the management of indigenous listed, proposed, and candidate species habitats. Also, consideration of other environmentally sensitive areas and other areas of special concern (for example, riparian zones, wetlands, highly erodible areas) should be identified and addressed in the Integrated Natural Resources Management Plan.

6–8. Diseases affecting fish, wildlife, and domestic animals

Fish and wildlife populations are susceptible to a large variety of morbidity and mortality factors, some of which may be shared among and between wild and domestic species. Requirements for interaction with other federal agencies, should a foreign animal disease be introduced on or near a military installation, are outlined in the Forces Command (FORSCOM) Animal Disease Eradications Plan (FADEP). Installation natural resources managers should consult with appropriate Veterinary Corps personnel regarding fish, wildlife, and domestic animal dieoffs and un–natural behavior occurring on their installation. Similarly, the responsible Army veterinarian, natural resource manager, or command element should contact local, State, and federal officials whenever necessary.

Chapter 7
Outdoor Recreation

7–1. Use of natural resources for outdoor recreation

a. Whenever practicable, Army lands with suitable natural resources will be managed to allow for outdoor recreational opportunities. The policies and procedures in this chapter apply to those outdoor recreation programs and opportunities as defined in the glossary and take precedence over AR 215–2.

b. Conservation of outdoor recreation resources will be considered in all plans, programs, site feasibility studies, and project planning and design.

c. Installations having natural resources suitable for outdoor recreation in addition to hunting, fishing, and trapping are encouraged to develop cooperative agreements with the National Park Service and appropriate state agencies to facilitate the development and management of those programs. Development of the installation Outdoor Recreation Plan (see TM 5–803–12) is a joint responsibility of the DEH, or the appropriate environmental directorate, and the Directorate of Personnel and Community Activities. The appropriate environmental directorate will address that portion of the plan that deals with the biological management of game species and natural resources while the Directorate of Personnel and Community Activity addresses the movement of persons, special events, and organizations elements of outdoor recreation. The Director of Personnel and Community Activities will take the lead and coordinate with the DEH for development of the installation's Outdoor Recreation Plan.

d. Public access to Army properties for the purpose of outdoor recreation will be allowed whenever compatible with public safety and mission activities. User fees may be collected to recover expenses of managing natural resources for outdoor recreation and access quotas may be established to reflect the carrying capacity of the area involved. Natural resources used for outdoor recreation on Army land are considered part of the land and belong to the public. Therefore, outdoor recreation opportunities will be equitably distributed by impartial procedures, such as first–come first–served or drawing lots. When public access must be withheld, that determination will be explained in the Integrated Natural Resources Management Plan.

7–2. Land use designation

Recreation facilities will be based upon formal design in accordance with the Installation Master Plan. Development of the General Recreation Plan portion of the Installation Master Plan (AR 210–20) will be coordinated with the Integrated Natural Resources Management Plan and will give attention to land use capability and limitations when determining recreation activities to be conducted.

7–3. Maintenance of recreational facilities

a. General. Maintenance responsibilities of the facilities engineer on recreational facilities (for example, badminton, tennis, and volleyball courts; baseball diamonds; football fields; playgrounds; and similar outdoor facilities) will include protection and replacement of playing surfaces, backstops, posts, fences, fixed playground equipment, and other fixed items, and the measuring and original permanent marking of diamonds, fields, courts, and similar playing areas. Maintenance of remote facilities may be performed by recreation services when more economical and agreed to by the facilities engineer and recreation services. Provision and maintenance of nets and other removable items, rolling, temporary marking and detailed treatment of playing areas, and similar services will not be accomplished as a facilities engineering responsibility.

b. Golf courses. The maintenance of golf courses is not a facilities engineering responsibility. Golf courses will be maintained with funds derived from user fees and will be self supporting. Funds appropriated to the Department of Defense may not be used to equip, operate, or maintain a golf course. This does not apply to facilities or installations outside the United States or at locations inside the United States designated by the Secretary of Defense as a remote and isolated location. The MACOM may authorize the use of water for irrigation if that authorization does not interfere with the normal domestic requirements of the installation and is in compliance with local water use and ititiatives. Cost of water and maintenance of irrigation systems will be funded from golf course maintenance accounts and will not utilize appropriated funds.

Chapter 8
Recreational Off–Road Vehicles (ORV)

8–1. Overview

a. Army is a trustee of public lands and has a responsibility to protect and enhance environmental quality, conserve natural resources, and provide opportunities for outdoor recreation. However, it must be recognized that land under Army control was acquired solely for national defense purposes. Other uses are, therefore, secondary to mission needs.

b. All land and water areas will be closed to off–road recreational use by motorized ORVs except those areas and trails which are determined suitable and specifically designated for such under the procedures established in this regulation.

(1) In determining suitability of areas and trails for ORV use, each type of motorized ORV will be considered separately, taking into account its potential environmental impact, the seasonal nature of its use and opportunities for counter–seasonal use with other recreational uses.

(2) The characteristics of use of one type of motorized recreational ORV will not affect or govern regulations on the use of an area or trail by another type of ORV use.

c. When ORV use is permitted, the intensity, timing, and distribution will be carefully regulated to protect the environmental values. In designating suitable sites, equitable treatment should be given to all forms of outdoor recreational activity and, where possible, nonconflicting use will be encouraged on existing trails. Prior to designating such areas or trails for ORV use, the environmental consequences must be assessed and environmental statements prepared and processed when such assessments indicate that the proposed use will create a significant environmental impact or be environmentally controversial (AR 200–-2). This procedure applies to all areas, including areas under consideration as well as those areas which are currently designated or being used by ORV's.

d. If the installation commander, or his or her designee, determines that ORV use is causing or will cause considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources, he or she will immediately prohibit the type of ORV use causing such effects and, if necessary, close such designated sites. Restrictions on ORV use or closure of designated sites will remain in effect until such adverse effects have been eliminated, including site restoration if necessary, and appropriate measures implemented to prevent any such recurrence.

e. Persons abusing the ORV use privilege will be barred, with their vehicles, from access to the Army installation for ORV use. Further action, as appropriate, may be taken under 18 USC section 1382. Violations of federal or State laws applicable to Army installations under title 18 USC (Assimilative Crimes) may be referred to a U.S. Magistrate according to AR 27–40 and AR 190–29.

f. The limitations imposed by this regulation on off–road travel by ORV's do not apply to official use. It is Army policy to minimize environmental degradation of sensitive portions of facility sites which play a significant ecosystem support role.

8–2. Program requirements

Commanders of Army installations and activities in the United States permitting ORV use—

a. Develops policy and procedures prescribing operating conditions for motorized ORV's and non–motorized mountain bikes which are designed to protect resource values; preserve public health, safety, and welfare; and minimize use conflicts. These procedures will include as a minimum the following:

(1) Registration: ORV's used both on and off the traffic way will be registered according to AR 190–5. ORV's operated solely off the traffic way will be registered at the discretion of the installation commander.

(2) Fees: Installation commanders are authorized to impose appropriate fees and charges for ORV activities according to AR 215–2, as an element of the Outdoor Recreation Program. Such fees and charges are accounted for as income to nonappropriated funds according to AR 215–5.

b. Ensures that lands where ORV use will be permitted are designated in the integrated natural resources management plan and where appropriate included as part of the installation's master plan (AR 210–20).

c. Provides opportunities for users to participate in the selection and designation of suitable sites, and distribute information which identifies authorized sites and describes the conditions of use. Organized recreational activities involving off–road vehicles are within the scope of responsibilities of the Outdoor Recreation Program of the Directorate of Personnel and Community Activities.

d. Posts appropriate signs at authorized areas and trails.

e. Provides for the administration, maintenance, enforcement, and policing of trails and areas to ensure that conditions of use are met on a continuing basis.

f. Establishes appropriate procedures to monitor the effects of the use of ORV's and provide for maintenance of the ORV areas or trails. This monitoring will be the basis for changes to installation policy to ensure adequate control of ORV use, amendment of area and trail designations, or conditions of use which are necessary to protect the environment, ensure the public safety, and minimize conflicts among users. Ensures that potential wildlife and vegetation disturbance is evaluated and that appropriate agency coordination occurs.

g. Negotiates cooperative agreements, when appropriate with State or local governments for enforcement of laws and regulations relating to ORV use.

h. Coordinates ORV use, projects, activities, designated ORV areas, and all related matters, with the installation Environmental Quality Control Committee (EQCC) and environmental office.

8–3. Environmental considerations

The environmental and related impacts of ORV use will be assessed according to AR 200–1 and AR 200–2. Coordination with adjacent private and public landowners and managers will be included in the assessment process. Coordination must be made to ensure all local, State, and federal requirements are met.

8–4. Guidelines and criteria for evaluation and utilization of Army lands for off–road vehicle use

a. Designation

(1) *Army land.* Army lands may be designated for one or more types of ORV use in response to a demonstrated need providing there is sufficient suitable areas available.

(2) *Land designated for one or more types of ORVs.* Lands which may not be designated for one or more types of ORV use are as follows:

(a) Areas restricted for security or safety purposes, such as explosive ordnance impact areas.

(b) Areas containing geological and soil conditions, flora or fauna, or other natural characteristics of fragile or unique nature which would be subject to excessive or irreversible damage by use of ORV's.

(c) Areas where the use by a type or types of ORV would cause unequivocal and irreversible damage or destruction as a result of such use, provided, however, that types of ORV not causing such damage or destruction may be permitted to use such areas.

(d) Areas which are key fish and wildlife habitats, as identified under environmental consideration, paragraph 84c(5);

(e) Areas which contain archeological sites, historical sites, petroglyphs, pictographs, or areas set aside for their scenic value, and areas in which noise would adversely affect other uses or wildlife resources.

(f) Areas in or adjacent to outdoor recreation areas where noise or vehicle emissions would be an irritant to users of the outdoor recreation area.

(g) Noise sensitive areas such as housing, schools, churches, or areas where noise or vehicular emissions would be an irritant to inhabitants.

(h) Areas or trails set aside for horses and their recreational use.

(i) Areas where ORV's use would disturb nesting or breeding of wildlife, especially those protected under Endangered Species Act or Migratory Bird Treaty Act.

(3) *Site designation.* Before designating sites for ORV and mountain bike use, the capabilities of the ecological factors and the impacts on the total ecosystem must first be assessed through the nepa process in order to determine carrying capacities and approved uses.

(a) Area designation. Area designation offers a greater freedom of movement and is probably preferred by users over trail designation. However, area designation may result in greater environmental damage and cause conflicts with other uses. Therefore, great care must be exercised in designating suitable sites for area use.

(b) Trail designation. Restrictions to designated trails probably constitute a compromise for most ORV users. However, this method is more compatible with the objective of this regulation. Therefore, when it is practicable to designate existing or proposed trails for use of ORV's without environmental despoilment, preference should be given to designating these sites. Trails currently used for hiking,

bicycling, or horseback riding will not be designated for concurrent ORV use.

(c) Use classification. Areas and trails should be classified as either open to public with access controlled within manageable quotas, or closed to the public. Where use of ORV's by installation personnel is permitted, exclusions of the public may not be justifiable except under the most compelling conditions.

b. Zones of use. Areas and trails will be located to minimize—

(1) Damage to soil, watershed, vegetation, or other resources of the public lands.

(2) Harassment of wildlife or significant disruption of wildlife habitat.

(3) Conflicts between ORV use and other existing or proposed recreational uses on the same or neighboring lands.

(4) Damage to overhead or underground utility distribution lines.

c. Environmental considerations (AR 200–1). Prior to designating areas or trails for use by a type or types of ORV's, consideration will be given to the possible traumatic effects on the environment by each type of ORV. Such considerations should not be limited to the proposed sites to be designated for ORV use. Some factors to consider are the effects of—

(1) Dust from the use of ORVs and emissions from internal combustion engines on air quality.

(2) Siltation in streams or other bodies of water which may result from soil erosion created by ORV's.

(3) Soil erodibility and soil compaction.

(4) Impact on native and desirable species of plants with special consideration given to those species listed as threatened or endangered.

(5) Impact on wildlife, their breeding and drumming, routes, grounds, winter feeding and yarding areas, migration routes, and nesting areas. Also, the effects of such use on the spawning, migration, and feeding habits of fish and other aquatic organisms, with particular attention given to the effects on fish and wildlife species classified as threatened or endangered or protected by federal or State laws and regulations.

(6) Excessive noise on humans and wildlife.

(7) Potential despoilment of aesthetic values or visual characteristics of the sites.

d. Operating criteria.

(1) Off–road vehicles will not be operated—

(a) In a reckless, careless, or negligent manner.

(b) In excess of established speed limits.

(c) While the operator is under the influence of alcohol, harmful drugs, or narcotics. Operators of ORV's cited or lawfully apprehended for any alleged offense while on Army lands, must consent to a test of their blood, breath, or urine for the purpose of determining the alcoholic content of their blood. Failure to submit to or complete such test will result in suspension of the use permit for a minimum of 6 months. See AR 190–5. As a condition for the privilege of operating ORVs on Army property, owners and operators consent to submit to a test of their blood, breath, or urine to determine if an illegal substance is present; or if cited or lawfully apprehended for any offense allegedly committed while driving or in control of an ORV on the installation.

(d) In a manner likely to cause excessive damage or disturbance of the land, wildlife, or vegetative resources.

(e) From sunset to sunrise without lighted headlights and tail lights.

(2) All off–road vehicles must conform to applicable State laws, including those with respect to pollutant emissions, noise, and registration requirements.

(3) No person may operate an ORV on Army lands without a valid operator's license or learner's permit where required by State or federal law. Unless contrary to State or federal law, persons under the age required for licensing may operate an ORV on Army lands providing they are at least 10 years of age and are under the direct supervision of an individual 18 years of age or older who has a valid operator's license when required by State or federal law, and who is responsible for the acts of that person.

(4) No ORV's may operate on Army land unless equipped with brakes in good working condition.

(5) Every ORV will at all times be equipped with a muffler in good working order which cannot be removed or otherwise altered while the vehicle is being operated on Army lands. To prevent excessive or unusual noise, no person will use a muffler cutout, bypass, or similar device on a motor vehicle. A vehicle that produces unusual or excessive noise or visible pollutants is prohibited.

(6) The carrying of firearms or other hunting instruments on any ORV will be according to applicable State or federal laws and regulations.

(7) All ORV operators and passengers will be required to wear safety helmets with face shields affixed.

(8) Off–road vehicles when operating off established road and parking areas not covered by ice, snow or water will be equipped with a properly installed spark arrester that meets standard 5100–la of the U.S. Forest Service, Department of Agriculture. This standard includes the requirements that such spark arrester will have an efficiency to retain or destroy at least 80 percent of carbon particles for all flow rates, and that such spark arrester has been warranted by its manufacturer as meeting these efficiency requirements for at least 1,000 hours, subject to normal use, with maintenance and mounting according to the manufacturer's recommendations.

Chapter 9
Plans

9–1. Scope

a. Integrated natural resources management plans, as referenced to in the Sikes Act, will be developed and maintained for all Army installations. These plans will be prepared, implemented, and monitored by natural resources management professionals. The plans will be coordinated with appropriate federal, State, and local natural resources managers and agencies with natural resources expertise and will be made available for public comment. The plan will include, as appropriate, parts: I General; II Land Management and Grounds Maintenance; III Forest Management; IV Fish and Wildlife Management; and V Outdoor Recreation. Plans will be used to assist planners and implementors of mission activities as well as natural resources managers. The integrated natural resources management plan will be a component and supporting element of the installation master plan. New and continuing mission activities that impact on natural resources will be coordinated with appropriate natural resources managers.

b. A natural resources management plan is integrated when the following criteria are met:

(1) All renewable natural resources and areas of critical or special concern are adequately addressed from both technical and policy standpoints.

(2) The natural resources management methodologies will sustain the capabilities of the renewable resources to support military requirements.

(3) The plan includes current inventories and conditions of natural resources; goals; management methods; schedules of activities and projects; priorities; responsibilities of installation planners and decision makers; monitoring systems; protection and enforcement systems; land use restrictions, limitations, and potentials or capabilities; and resource requirements including professional and technical manpower.

(4) Each plan segment or component (that is, land, forest, fish and wildlife, and outdoor recreation) exhibits compatible methodologies and goals including compliance with the Endangered Species Act and applicable Endangered Species Management Plans.

(5) The plan is compatible with the installation's master plan, pest management plan, and Master Training Schedule.

c. 16 USC 670a provides a requirement whereby the Army installation, the FWS and the host state cooperate in planning, maintaining, and coordinating fish and wildlife management activities on installations. A cooperative plan (that is Part IV Fish and Wildlife

Management of the Natural Resources Management Plan) will be signed by an installation commander, the U.S. Fish and Wildlife Service, and the appropriate State agency, only after ensuring compatibility with the applicable integrated natural resources management plan. Fish and Wildlife Cooperative Plans will be reviewed annually by cooperators and revised no less than every 5 years.

9–2. Criteria for the integrated natural resources management plan

a. Parts I and II will be prepared by installations having 500 or more acres of improved, semi–improved and unimproved grounds combined, or 50 or more acres of improved grounds.

b. The landscape planting plan, appendix to Part II, will be prepared for all installations which are required by AR 210–20 to prepare a complete master plan. Installations performing landscaping will prepare landscape design drawings to cover the work intended when other than replacement planting of like species is involved. New landscape designs not included in Part II must be approved by the MACOM.

c. Part III will be prepared by installations having 100 or more acres of commercial forest land.

d. Part IV will be prepared by installations having land and water areas suitable for the management of fish and wildlife resources. The suitability of a military installation for fish and wildlife management will be determined by the MACOM and the installation after consulting with the USFWS and host state.

e. Part V will be prepared by installations with outdoor recreation programs which depend upon maintenance and management of the natural resources.

9–3. Preparation

a. Guidelines to be used in the preparation of plans are contained in TM 5–630, TM 5–631, TM 5–633, and TM 5–635.

b. The installation natural resources management plan will be prepared and kept current by qualified professional natural resources personnel. The formats given in TM 5–630, TM 5–631, TM 5–633, and TM 5–635 will be used when completing major revisions to existing plans or in preparing new ones.

9–4. Revisions

The installation natural resources management plan will be reviewed annually and revised as necessary, utilizing binders which facilitate page changes. Major revisions of all Parts will be accomplished at least every 5 years. Landscape planting plans will be revised as needed. Information such as that relating to soils, natural vegetation and environmental data, not requiring revision, should be retained in the plan.

9–5. Approval

Each installation natural resources management plan and major revision thereof will be forwarded to the MACOM for approval. The approved plan, together with TM 5–630, TM 5–631, TM 5–633, and TM 5–635 will be the technical basis for installation implementation. Review, approval, and distribution of annual revisions (for example, work plans) will be in accordance with provisions established by the MACOM.

9–6. Requirements control exemption

These plans are exempt under AR 335–15, paragraph 7–2a.

Chapter 10
Conservation awards

10–1. The Secretary of Defense Natural Resources Conservation Awards

a. The Secretary of Defense will annually present an award to the installation of the Army, Navy, Air Force, or Marine Corps that conducted the most outstanding natural resources conservation program in their installation category during the 3 preceding calendar years. Suitable recognition will also be presented to the runner–up installations.

b. The installation award will be given on alternate years to a small installation (designated category A) and the next year to an installation in the large category (designated category B). Category A installations are defined as those with 10,000 acres or less on the main installation. Category B installations are those of more than 10,000 acres.

c. Because of the time needed to bring natural resources management programs to fruition, the judging for the installation award will be based on 3 years' achievements. For example, the installation award presented in calendar year 1994 will be based on achievements made by a category B installation during calendar years 1991, 1992, and 1993. The annual competition will alternate between category A and category B installations (for example, category A in 1995 for years 1992, 1993, and 1994; category B in 1996 for years 1993, 1994, and 1995).

d. An award also will be presented each year to an individual, military or civilian employee or volunteer, who has made the most outstanding contributions to the DOD Natural Resources Program.

e. The installation award program applies to Active Army, National Guard, and Army Reserve installations and facilities worldwide. The individual award program applies worldwide also with the exception of personnel assigned to HQDA, MACOMs, and support agencies that participate in selecting the Army nominee for this award.

10–2. Army Chief of Staff Natural Resources Conservation Award

a. This award will be presented annually present an award to the installation that conducted the most outstanding natural resources conservation program during the three preceding calendar years. The installation selected as winner of this award will represent the Army in the DOD competition.

b. When available, agriculture and/or grazing lease reimbursable funds will be distributed by DAIM–ED to the installation judged to be the Army nominee for the Secretary of Defense award. Additionally, two other installation programs judged worthy will be recognized. Amounts to be distributed are: First Place, $50,000; Second Place, $30,000; and Third Place, $20,000.

c. Installations receiving these funds are encouraged to use them for conservation education on the installation, improvements to the installation conservation program, or to increase the installation's conservation program visibility.

10–3. Preparation

a. Installation submissions will address only items that are applicable to the installation Natural Resources Management program. Pollution abatement activities may not be included unless they are related directly to natural resources conservation. The submission may not exceed 50 pages of text including illustrations. Appendixes directly supporting the text may be added. The format for the installation nominations is provided at appendix B.

b. Individual award nominations will be narrative in style, may not exceed 4 typewritten pages in length, and will describe the nominees' accomplishments in natural resources management and his or her contributions to the DOD conservation goals during the preceding calendar year. Photographs may not accompany the nomination. The format for the individual nominations is provided at appendix B.

10–4. Submission of nominations

a. Judging for the DOD award is based upon content of the nomination brochure and an illustrated presentation to the judges. The quality of these is important.

b. Six copies of the nominations for the installation and individual awards will be submitted to U.S. Army Directorate of Environmental Programs, ATTN: DAIM–ED–N, 600 Army Pentagon, Washington, DC 20310–0600, by 10 February of each year. Requirements control symbol DD–P&L(A)670 will be used for these submissions.

(1) Headquarters, FORSCOM, U.S. Army Training and Doctrine Command (TRADOC) and U.S. Army Materiel Command (AMC) may each make four nominations for each award.

(2) Other MACOMs may submit a maximum of two nominations each for each award as appropriate.

10–5. Section of Army nominees for the DOD awards

a. The Army Selection Committee will be chaired by a representative of the Office of the Secretary of the Army with additional members representing Army outdoor recreation programs and Army natural resources and/or environmental management programs. The Selection Committee will select one installation and one individual from those nominated by MACOMs for each award. The selected installation and individual will be notified by the U.S. Army Directorate of Environmental Programs, Conservation Division.

b. Nominations and recommendations will be routed through the offices of the Chief of Staff, Army, and the Secretary of the Army to the Office of the Secretary of Defense for consideration by 22 March of each year. The awards ceremony and reception will be at the Pentagon on Earth Day or thereabouts as designated annually by the Secretary of Defense. Additionally, the Directorate of Environmental Programs will furnish a copy of Army's nomination package to OCPA for informational use no later than 1 May annually.

10–6. MACOM Award Programs

MACOMs may develop their own conservation award programs as a selection process for annual submissions to HQDA for the Secretary of Defense Natural Resources Conservation Award. MACOM award programs would be an encouragement to installations for the conduct of outstanding natural resources programs and incentive for program participation.

Chapter 11
Endangered/Threatened Species Guidance

11–1. Army policy on listed species

The purpose of this chapter is to implement within the Army the requirements of the Endangered Species Act and the implementing regulations of the USFWS and NMFS (50 CFR Part 402).

a. Balancing mission requirements. The Army is committed to being a national leader in conserving listed species. DA personnel at all levels must ensure that they carry out mission requirements in harmony with the requirements of the Endangered Species Act (ESA) of 1973, sections 1531 to 1544, title 16, United States Code (16 USC 1531–1544). Mission requirements do not justify actions violating the ESA. All Army land uses, including military training, testing, timber harvesting, recreation, and grazing, are subject to ESA requirements for the protection of listed species and critical habitat. The key to successfully balancing mission requirements and the conservation of listed species is long–term planning and effective management to prevent conflicts between these competing interests.

b. Cooperation and informal consultation with regulatory agencies. In fulfilling its conservation responsibilities under the ESA, the Army will work closely and cooperatively with the Federal agencies charged with enforcement of the act: the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS). In planning projects and activities, installations should engage in informal consultation with the FWS or NMFS at the earliest opportunity to ensure that proposed actions that may affect listed species or critical habitat are consistent with the requirements of the ESA. Installations will routinely seek informal FWS or NMFS review of installation plans. If there is any question whether an Army action may affect a listed species or critical habitat, DA personnel should informally consult with the NMFS or FWS to determine the need for formal consultation. Working closely and cooperatively with the FWS and NMFS through informal consultation to develop mutually satisfactory courses of action is in the Army's best interest.

c. Biological diversity.

(1) It is an Army goal to systematically conserve biological diversity on Army lands within the context of its mission. Natural ecosystems can best be maintained by protecting the biological diversity of naturally occurring organisms and the ecological processes that they perform and with which they interact. The Army also recognizes the importance of habitat management, the key to effective conservation of biological diversity, in the protection of listed, proposed, and candidate species. Conserving native species in numbers and distributions that provide a high likelihood of continued existence is a crucial element of biological diversity. Conserving and restoring biological diversity minimizes the number of species that must be protected as threatened and endangered.

(2) To the greatest extent practicable, installation commanders and Army natural resource planners and managers at all levels will develop and implement policies and strategies to assist, in cooperation with other landowners, to achieve the following objectives:

(a) Maintenance of viable populations of the nation's native plants and animals throughout their geographic range.

(b) Maintenance of natural genetic variability within and among populations of native species.

(c) Maintenance of functioning representative examples of the full spectrum of ecosystems, biological communities, habitats, and their ecological processes.

(d) Implementation of management solutions which integrate human activities with the conservation of biological diversity.

(e) Increased scientific understanding of biological diversity and conservation.

(f) Public awareness and understanding of biological diversity.

(g) Encouragement of private sector development and application of innovative approaches to the conservation of biological diversity.

11–2. Summary of Primary Endangered Species Act Requirements

The ESA imposes five primary requirements upon the Army.

a. Requirement to conserve listed species. Section 7(a)(1) of the ESA requires the Army to carry out programs for the conservation of listed species. "Conservation", as defined by the ESA, means the use of all methods and procedures that are necessary to bring any listed species to the point where protections provided pursuant to the ESA are no longer necessary. Therefore, the Army has a responsibility to take affirmative measures to increase, as well as to avoid actions likely. to jeopardize, listed species. This chapter is the Army's primary means of implementing the ESA requirement to conserve listed species.

b. Requirement not to "jeopardize" listed species. Section 7(a)(2) of the ESA requires the Army to ensure that any action authorized, funded, or carried out by it is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. "Jeopardize" means to engage in an action that would be expected, directly or indirectly, to reduce appreciably the likelihood of the survival and recovery of a listed species by reducing its reproduction, numbers, or distribution. Irrespective of any opinion, action, or inaction by the FWS or NMFS, the Army is ultimately responsible for ensuring that its actions do not jeopardize listed species or result in the destruction or adverse modification of critical habitat.

c. Requirement to "consult" and "confer."

(1) Section 7(a) of the ESA requires formal consultation with the FWS or NMFS whenever the Army anticipates taking any action or is engaging in on–going action that may affect, beneficially or adversely, a listed species or critical habitat. Formal consultation, however, is not required if it is determined by the Army, with the written concurrence of the FWS or NMFS, that the action is not likely to adversely affect any listed species or critical habitat. Early entry into informal consultation with the FWS is key to resolving potential problems and establishing the foundation to address issues in a proactive and positive manner and is the preferred method of consultation. Additionally, the Army must confer with the FWS or

NMFS whenever an action is likely to jeopardize any species proposed for listing as threatened or endangered under the ESA (proposed species) or to result in the destruction or adverse modification of proposed critical habitat. Informal consultation with the FWS or NMFS is always appropriate to clarify an action command's ESA responsibilities. Consultation and conference procedures are discussed in paragraph 11-7.

(2) The NMFS has jurisdiction over most marine species. (See section 23a, part 222, title 50, Code of Federal Regulations (50 CFR 222.23(a)) and 50 CFR 227.4 for a listing of species within NMFS jurisdiction.) The FWS has jurisdiction over all other species.

(3) "Action" is broadly defined in 50 CFR 402.02 to include: measures to conserve listed species or critical habitat; promulgation of plans and regulations; granting of licenses, contracts, leases, easements, rights–of–way, and permits; construction projects; and so forth.

d. Requirement to conduct a biological assessment. Section 7(c) of the ESA and the implementing regulations (50 CFR 400.18) requires the Army to conduct biological assessments for major construction and other activities having similar physical impacts on the environment if—

(1) The impacts will significantly affect the quality of the human environment as referred to in the National Environmental Policy Act of 1969 (NEPA) and

(2) Any listed species or critical habitat is present in the area directly or indirectly affected by the action (action area).

e. Requirement not to "take" listed fish and wildlife species or to remove or destroy listed plant species. Under section 9 of the ESA, "take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct " with respect to listed fish and wildlife. It includes significant habitat modification or degradation that kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Section 9 further makes it unlawful to remove and reduce to possession any listed plant from areas under federal jurisdiction or to maliciously damage or destroy any listed plant in such areas.

11–3. Compliance with the Endangered Species Act

a. DA personnel who violate the provisions of the ESA or implementing FWS/NMFS regulations are subject to both civil and criminal penalties. Criminal violations are punishable by a fine up to $50,000 and imprisonment of up to one year for each violation. The law imposes civil and criminal penalties for the knowing failure to take required action (such as willful failure to consult with the FWS or NMFS when legally required) and for the commission of prohibited acts (such as "taking" a listed species). DA personnel are not immune from prosecution. Actions in violation of the ESA or of implementing FWS/NMFS regulations are not within the scope of the official duties and responsibilities of DA personnel.

b. Failure to comply with the ESA can result in halting or delaying ongoing or proposed projects and activities. Proponents of Army actions will coordinate with the installation's natural resources staff early in the planning stage of projects and activities to identify potential conflicts with the conservation of listed and proposed species. The installation engineer and the environmental directorate, where applicable, will integrate endangered species management and installation planning functions to avoid conflicts with ESA requirements

c. Installations will enforce the protective measures specified in Endangered Species Management Plans (ESMPs) (paragraphs 11–5 and 11–6) by the issuance of regulations punishable under the Uniform Code of Military Justice. Installations will designate and train law enforcement personnel to enforce these regulations.

11–4. Candidate and State–listed species

a. Candidate species. Species that are candidates for federal listing as threatened or endangered are not protected under the ESA. Because candidate species may be listed in the future, installations will consider them in making decisions that may affect them. Installations will avoid taking actions that result in the need to list candidate species as threatened or endangered. Installations are encouraged to develop ESMPs for candidate species and to participate in conservation agreements with the FWS. Affirmative action to conserve candidate species can preclude the need to list such species. At a minimum, installations will document the distribution of candidate species on the installation and monitor their listing status. Early planning and coordination with the FWS or NMFS will avoid conflicts with mission requirements and speed development of an ESMP if the species is formally proposed for listing.

b. State–listed species. Army installations must be sensitive to those species listed as endangered or threatened under State law, but not federally listed. State, but not federal, listed species are not protected under the ESA. Whenever feasible, installations should cooperate with State authorities in efforts to conserve these species. There is no requirement for ESMPs for State–listed species. Installations, however, will identify State–listed species in the installation's cooperative plan and set forth agreed conservation measures. Additionally, NEPA normally requires an environmental assessment for activities affecting State–listed species. AR 200–2, paragraph 5–3q.

11–5. Endangered Species Management Plan (ESMP) and Guidelines (ESMG)

a. General requirement.

(1) Installations will prepare ESMPs for listed and proposed species and critical habitat present on the installation, including areas used by tenant organizations. Installation ESMPs are the Army's primary means of ensuring ESA compliance and balancing mission requirements. Army endangered species management will give first priority to the preparation and resourcing of installation ESMPs, including associated inventories. HQDA and MACOMs will assist installations in obtaining adequate funding and support to effectively develop and implement ESMPs. (Refer to para 2–3.) Installation commanders will approve ESMPs, as required by this regulation, within one year after the discovery of a listed/proposed species or the proposal for listing a species or proposal for designation of critical habitat, whichever occurs first.

(2) In addition to installation ESMPs, MACOMs will consider preparing a MACOM ESMG for listed and proposed species present on more than one subordinate installation when a species has or could have a significant impact on the installations' ability to support mission requirements. The MACOM will also consider whether limited resources could more effectively be directed toward preparation and resourcing of installation ESMPs. If prepared, the MACOM ESMG will contain guidance to be used by installations in preparing ESMPs (para c below). If the MACOM determines that a MACOM ESMG is not warranted, the MACOM will, however, issue sufficient written guidance to ensure: unity of effort, a shared research and development program, and the efficient use of MACOM resources.

(3) Where a listed species or proposed species involves more than one MACOM and has the potential to significantly affect Army training or readiness, MACOMs may request that HQDA prepare an HQDA ESMG instead of or in addition to a MACOM ESMG. MACOMs should forward requests to HQDA (DAIM–ED).

(4) HQDA will consider preparing an HQDA ESMG for listed and proposed species present on installations in more than one MACOM when it is determined that a species has or could have a significant impact on Army mission requirements. HDQDA will also consider whether limited resources could more effectively be directed toward preparation and resourcing of installation ESMPs. If HQDA determines that an HQDA ESMG is not warranted, HQDA will, however, issue sufficient written guidance to ensure: unity of effort, a shared research and development program, and the efficient use of Army resources.

(5) All proposed ESMPs and ESMGs are subject to the requirements of NEPA, in addition to the consultation requirements of 7 of the ESA.

b. Installation ESMPs.

(1) Installations will prepare ESMPs for each listed and proposed

species and critical habitat on the installation. They may combine ESMPs, provided the combined plans satisfy the substantive requirements in (3) and (4) below. If feasible, combined ESMPs addressing several species and focusing on management of the supporting ecosystem is encouraged.

(2) Upon approval by the installation commander, the ESMP will be made part of the installation's Integrated Natural Resources Management Plan and the cooperative plan (see para l1–6a) as required by the Sikes Act.

(3) Installation ESMPs will prescribe area specific measures necessary to meet the installations' conservation goals for the subject species and critical habitats. ESMPs will be consistent with MACOM or HQDA ESMGs as applicable, or other MACOM or HQDA guidance on the subject species, unless FWS or NMFS biological opinions require otherwise. In the latter case, installations will report inconsistencies between MACOM or HQDA guidance and FWS or NMFS opinions, through MACOM channels, to HQDA (DAIM–ED), in coordination with the Judge Advocate General (TJAG, DAJA–EL). DAIM–ED will expeditiously review such reports and determine if HQDA level action is necessary. Installations will not finally approve ESMPs until this HQDA review is completed.

(4) Preparation of ESMPs requires a systematic, step–by–step approach. The species' population size (current and goal), habitat (current and potential), and training and other mission requirements (present and future) must be identified. Detailed evaluation of these factors and their interrelated impacts are required as a first step in the development of ESMPs. The length and detail of installation ESMPs are dependent upon the complexity of the management problems associated with the species and its habitat. At a minimum, installation ESMPs will include the following:

(a) Documented survey and inventory information (including maps, written descriptions, GIS database, and so forth) on the species, including habitat distribution and the location and size of the installation population.

(b) The installation's conservation goals for the subject species and critical habitat, established in consultation with the FWS or NMFS.

(c) Objective, measurable criteria which, when met, would meet the installation's conservation goals for the listed species and critical habitat and milestones for achieving the goals.

(d) Area specific management prescriptions and actions necessary to meet the installation's conservation goals for the species and critical habitat.

(e) Means to include, as appropriate, ESMP provisions into the installations Integrated Training Area Management (ITAM) program.

(f) An on–going inventory and monitoring plan.

(g) Estimates of the time, cost, and personnel needed to carry out those measures needed to achieve the conservation goals.

(h) A checklist for use by those assessing installation compliance with the ESMP (para 11–6g). The checklist should identify actions, tasks, and steps required to effectively implement the ESMP over its projected life; the objective milestones for achieving conservation goals; and the primary conservation measures specified in the ESMP. Checklists are intended to be the primary tool used in assessing installation compliance with ESMPs. A well–designed checklist will serve as a stand–alone guide for those conducting the assessment. No particular format is required, however, checklists should include a brief narrative explanation for each point on the checklist and a cross–reference to the pertinent ESMP provision.

c. MACOM ESMGs. The length and detail of MACOM ESMGs are dependent upon the complexity of the management problems associated with the species and its habitat. At a minimum, MACOM ESMGs will contain guidance to subordinate installations necessary for effective MACOM–wide management of the listed species and critical habitat, avoidance of duplication of effort, uniformity of management practices wherever feasible, efficient use of MACOM resources, and appropriate MACOM coordination and oversight.

d. HQDA ESMGs. The length and detail of HQDA ESMGs are dependent upon the complexity of the management problems associated with the species and its habitat. At a minimum, HQDA ESMGs will contain guidance to Army installations necessary for effective Army–wide management of the listed species and critical habitat, avoidance of duplication of effort, uniformity of management practices wherever feasible, efficient use of Army resources, and appropriate HQDA coordination and oversight.

11–6. Preparation and approval of ESMPs and ESMGs

a. Installation level ESMPs.

(1) The installation engineer (or environmental directorate where applicable), in coordination with the testing or training directorate and the installation environmental law specialist, prepares installation ESMPs. Installations will establish working teams to draft ESMPs, each team comprised of, at a minimum, natural resources personnel, testers or trainers, and the environmental law specialist. The installation engineer identifies and arranges for other installation personnel to advise the team on funding and contracting matters. The team complies with NEPA and ESA procedural requirements, including conference and consultation with the FWS or NMFS, coordination with appropriate State agencies (State concurrence to the Cooperative Plan is necessary under the Sikes Act (see (5) below)), and preparation of NEPA documentation. The team informally consults with and receives input from the FWS or NMFS throughout the ESMP development process. On smaller installations, and Government–owned contractor–operated facilities, where there are inadequate resources to establish a team (for example, no SJA office or natural resources personnel), the responsible installation engineer coordinates with the MACOM staff for the necessary support.

(2) The installation engineer or environmental director briefs the Environmental Quality Control Committee (EQCC) (see section 2–5 and AR 200–1) on each proposed ESMP and supporting NEPA documentation.

(3) The installation SJA renders a written legal opinion stating whether the approval of the ESMP and supporting NEPA documentation will be according to NEPA, ESA, and regulatory requirements before the ESMP is forwarded to the installation commander for approval.

(4) An ESMP is not effective until it and the supporting NEPA documentation are approved and signed by the installation commander.

(5) Upon approval of the ESMP by the installation commander, the installation engineer obtains final, formal agreement from the FWS or NMFS, and the State wildlife agency to include the ESMP as part of the cooperative plan. (An informal agreement should be obtained during the development process). The installation engineer, in coordination with the testing or training directorate, integrates the ESMP's provisions into ITAM planning resourcing (para 11–12). Installations will revise the installation Real Property Master Plan (RPMP) according to AR 210–20. Installations will forward a copy of the approved ESMP to HQDA (DAIM–ED) and the MACOM engineer (or staff environmental officer where appropriate).

(6) The MACOM engineer or MACOM environmental director reviews installation ESMPs to monitor compliance with this regulation, and identifies funding and personnel requirements to detect problems that could significantly impact on future mission requirements. Every effort will be made by MACOMs to resolve identified problems and issues. The MACOM will report problems that cannot be resolved to the Office of the Director of Environmental Programs (DAIM–ED). The MACOMs will retain copies of ESMPs and will make them available to other installations that could benefit from the completed work.

b. MACOM level ESMGs. If prepared, the MACOM engineer (or MACOM environmental director), in coordination with the MACOM DCSOPS and Staff Judge Advocate, prepares MACOM ESMGs. MACOMs will establish working teams comprised of, at a minimum, natural resources personnel, military trainers, or testers, and an environmental attorney to prepare ESMGs. The team complies with NEPA and ESA procedural requirements, including conference and consultation with the FWS or NMFS and preparation of

NEPA documentation. The SJA renders a written legal opinion stating whether the approval of a MACOM ESMG and supporting NEPA documentation will be according to NEPA, ESA, and regulatory requirements. ESMGs will not become effective until approved and signed by the MACOM chief of staff. MACOMs will forward a copy of MACOM ESMGs to HQDA, ATTN: (DAIM–ED) and to affected subordinate installations.

c. HQDA level ESMGs. HQDA (DAIM–ED), in coordination with the Office of the Deputy Chief of Staff for Operations and Plans (ODCSOPS) (DAMO–TRS) and the Office of The Judge Advocate General (OTJAG) (DAJA–EL)), prepares HQDA ESMGs. The Director of Environmental Programs approves HQDA ESMGs. As necessary, the Director of Environmental Programs may direct the formation of teams to develop HQDA ESMGs. The teams, at a minimum, will have DAIM–ED, ODCSOPS, and DAJA–EL representation. The teams will operate under the operational control and direction of the Director of Environmental Programs. The team or, if none is formed, DAIM–ED, in coordination with DAJA–EL, will consult with the FWS or NMFS as required by the ESA and prepare supporting NEPA documentation.

d. Coordination outside HQDA. Other federal, State, and private lands are important to the survival and recovery of endangered species. Effective conservation will normally depend upon a comprehensive effort throughout the species' range. To assist in this effort, installations with listed or proposed species should encourage and support local, regional, and range–wide cooperative agreements for the conservation of these species with other federal, State, and private landowners; conservation organizations; and the FWS or NMFS. Additionally, these installations will take the lead in promoting conservation efforts on non–Army lands surrounding installations to preclude having to sustain and recover listed species populations entirely on Army lands. Army proponents of ESMPs and ESMGs at all levels should establish and participate in joint task forces with other DOD entities to develop common plans, share information and resources, and avoid duplication of efforts.

e. Annual review of ESMPs and ESMGs. Proponents will review their ESMPs or ESMGs annually and update them as required to meet conservation goals. Installations should conduct the annual review of ESMPs concurrently with preparation of the annual installation engineer's or environmental director's ESMP compliance report required by g below. Except for minor changes, installations will prepare and approve revisions in the same manner as the ESMPs themselves. Minor changes may be approved by the installation engineer or environmental director, where applicable, after: coordination with the SJA and training or testing directorate; informal consultation with the FWS or NMFS; and coordination with the appropriate State agency. Minor changes include only those changes that will have no effect (considered together with all previous minor changes to the current ESMP), beneficial or adverse, on listed or proposed species or critical habitat. The cooperative plan will be amended to reflect minor changes at least every two years.

f. NEPA compliance.

(1) NEPA, implemented by AR 200–2, applies to actions taken in managing listed and proposed species and critical habitats. Consultation under section 7 of the ESA does not replace compliance with NEPA requirements. In preparing and staffing ESMPs, proponents must ensure that they satisfy NEPA requirements. Proponents will normally prepare environmental assessments for activities, including developing ESMPs and ESMGs, that affect federal or State, listed or proposed species, or critical or proposed critical habitat (para 5–2q, AR 200 2). NEPA requires an environmental impact statement if an ESMP or ESMGs will significantly affect a listed or proposed species, critical habitat or proposed critical habitat, or the human environment (See AR 200–2, para 6–2.) To avoid unnecessary delay, proponents should provide complete NEPA documentation for early inclusion with recommendations or reports on ESMPs and ESMGs.

(2) Consultation, conference, and biological assessment procedures under section 7 of the ESA should be consolidated with NEPA procedures to the maximum extent feasible. Simultaneous compliance with NEPA and ESA procedures minimizes duplication of effort and avoids delay. Proponents may combine ESA and NEPA documentation to reduce paperwork (such as the biological assessment and environmental assessment) so long as the requirements of both statutes are met. Generally, an installation should determine the effect of a proposed action on listed species or critical habitat according to ESA section 7 before completing NEPA documentation. Proponents will not avoid consultation with the FWS or NMFS to facilitate completion of NEPA documentation.

g. Monitoring compliance with and effectiveness of ESMPs. Installations will use the following means to monitor compliance with and the effectiveness of ESMPs. Those conducting assessments will, at a minimum, use the checklist contained in each ESMP (para I 1–5b(4)(h)).

(1) *Assessments.* Installations will ensure that external and internal environmental audits, conducted according to paragraph 12–8, AR 200–1, thoroughly assess compliance with, progress under, and the effectiveness of ESMPs. Prior to commencing assessments, the installation engineer or environmental director will provide assessment teams with ESMP checklists and explain their use and purpose.

(2) *Annual review.*

(a) During the fourth quarter of each calendar year, the installation engineer or environmental director will make a written report to the installation commander. The report will be reviewed by the installation SJA and the EQCC before it is sent to the installation commander.

(b) The report specified in (a) above will include information on: the status of listed and proposed species and their habitats on the installation, progress toward completion of any incomplete ESMPs, progress toward installation conservation goals, actions taken to implement ESMPs, contacts with the FWS or NMFS, ESA violations, problem areas, compliance with MACOM and HQDA guidance, changes to ESMPs, and any other information necessary for reviewers to make an independent assessment of installation compliance with and the effectiveness of ESMPs in balancing conservation with other mission requirements. If the report concludes that the installation is not in full compliance with the ESMP or the ESMP is not effective in meeting installation goals, the report will enumerate the deficiencies and contain recommendations for resolving the deficiencies.

(c) Installation commanders will approve and sign annual ESMP reports. Installations will forward approved reports to the MACOM for review and approval. Reports must be received by the MACOM by 31 December.

(d) If an installation is not in full compliance with an ESMP, the ESMP is not effective in meeting the installation's goals, or another endangered species management problem is indicated, the MACOM will coordinate with HQDA (DAIM–ED), and other organizations, as necessary, to develop an effective solution.

11–7. Formal consultation and conference procedures

a. Requirement

(1) *Formal consultation.*

(a) Formal consultation under section 7(a)(2) of the ESA is a formal procedure that takes place between the FWS or NMFS and another federal agency. (See fig 11–1.) 50 CFR part 402 sets out detailed consultation procedures. The process begins with a written request to the FWS or NMFS to initiate formal consultation. The process results in the issuance of a biological opinion by the FWS or NMFS to the agency. Written requests for consultation must contain the information required by 50 CFR 402.14(c), including the biological assessment, if prepared, and other relevant materials, such as environmental impact statement or environmental assessment.

(b) Installations must review all activities at the earliest opportunity to determine whether any action may affect listed species or critical habitat. This review must be conducted on an on–going basis by all action proponents, commanders, installation engineers, and environmental directorates. The installation commander ensures that this requirement is met. "Action" includes virtually all activities. (See glossary.) If the installation decides that a proposed action "may affect" a listed species or critical habitat, it must formally

consult with the NMFS or FWS. If, however, the installation decides that an action is not likely to adversely affect the listed species or its habitat, and the FWS or NMFS concurs, in writing, formal consultation is not required; Without the written concurrence of the FWS or NMFS; consultation is mandatory.

(2) *Conference.* Installations must confer with the FWS or NMFS on any action that is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat. Conference procedures are designed to help the action proponent in identifying and resolving potential conflicts before the species is listed or critical habitat is designated. Upon listing of a species or designation of critical habitat, installations must review proposed actions to determine if formal consultation is necessary even if a conference has occurred. The conference process usually consists of informal discussions resulting in advisory recommendations from the FWS or NMFS. The proponent may request, however, that the conference be conducted as a formal consultation. If the FWS or NMFS consents, formal conference is conducted according to the procedures for formal consultation. If conducted formally the FWS or NMFS may adopt the opinion issued at the conclusion of the conference as the biological opinion when the species is listed or critical habitat is designated (e(4) below). Installations may use informal consultation and/or a biological assessment to decide if a conference is required. A biological assessment is not required for proposed species. 50 CFR part 402.10 sets out detailed conference procedures.

(3) *Commitment of resources pending completion of formal consultation.* For proposed actions that may require formal consultation, action proponents will make no irreversible or irretrievable commitment of resources that will foreclose the formulation or implementation of any reasonable and prudent alternative before completion of formal consultation or the written concurrence of FWS or NMFS that it is not required.

(4) *Conducting consultation and conference.* Except for ESMPs (See para l l4(a)(l) above), consultation (formal and informal) and conference with the FWS or NMFS on installation actions will be conducted by the installation engineer or environmental directorate, in coordination with the training or testing directorate, and the environmental law specialist. Technical assistance will be available from MACOMs and HQDA (DAIM–ED and DAJA–EL).

b. Notice of initiation of formal consultation.

(1) Installations will coordinate with the MACOM in conducting biological assessments and informal consultation preliminary to initiating formal consultation. Before initiating formal consultation, installations will forward through MACOM channels a summary of the proposed action and all of the documents they intend to submit to the FWS or NMFS (for example, biological assessment, biological evaluation) to HQDA (DAIM–ED). DAIM–ED, in coordination with DAJA–EL, will review proposals for formal consultation and supporting documents and provide comments.

(2) MACOMs will coordinate with DAIM–ED before initiating formal consultation on MACOM ESMGs.

c. The "may affect" determination.

(1) Informal consultation with the FWS or NMFS and a biological assessment or biological evaluation will be used in assessing whether an action may affect a listed species or critical habitat. The presence of a listed species in the area directly or indirectly affected by the action (action area) will normally result in a "may affect" determination. Where a listed species or critical habitat is present in the action area, a "no affect" determination should be made only if the EWS or NMFS concurs through informal consultation. Installations will document FWS or NMFS concurrence. A "may affect" determination does not necessarily mean that the installation will receive a jeopardy biological opinion.

(2) Installations should engage in informal consultation with the FWS or NMFS at the earliest opportunity to assess the effects of Army actions and decide the need for formal consultation. Even where the installation makes a "may affect" determination, continued informal consultation may be productive. Modifications agreed to through informal consultation may avoid the need for formal consultation.

(3) A biological assessment is required for major construction proposal or other activities that may have an impact on the environment where a listed species or critical habitat is present in the action area (d below). Even if not legally required, a biological assessment is a good way to assess the impact of an action on listed or proposed species and critical habitat and present the Army's scientific case supporting its determination. Installations should prepare a biological assessment for all actions that may result in formal consultation. If a biological assessment is not required, installations will prepare a written biological evaluation at a minimum documenting its determination of the effect or no effect of an action on listed species and critical habitat. Biological evaluations should set forth the biologically supportable rationale for the installation's determination.

(4) The Army provides the FWS or NMFS with the most current and the best scientific and commercial data available during the consultation process. If reasonably available data are not provided for formulation of a biological opinion, the FWS or NMFS can request that the agency obtain available data, that more studies or surveys be undertaken at the Army's expense, or that the Army await the results of relevant non–Army studies.

(5) Biological assessments should include the following information:

(a) The results of an on–site inspection of the action area to discover if listed or proposed species are present or occur seasonally.

(b) The views of recognized experts on the subject species and its habitat.

(c) A review of the literature and other information on the species and its habitat.

(d) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies. "Cumulative effects" under the ESA include those future, nonfederal (State, local, or privates) activities that are reasonably certain to occur in the action area.

(e) Coordination/mitigation measures that will reduce/eliminate adverse impacts to listed or proposed species.

(f) A determination of whether the action is "likely to adversely affect" or "not likely to adversely affect" listed species.

(g) For proposed species, a determination of whether the action "is likely to jeopardize" or "is not likely to jeopardize" the continued existence of proposed species.

(h) A determination of whether the action is likely to result in the destruction or adverse modification of a critical habitat or a proposed critical habitat.

(i) An analysis of alternative actions considered by the action proponent.

d. Major activities.

(1) For major construction activities or other activities having similar physical impacts on the environment, where the impacts will significantly affect the quality of the human environment as referred to in NEPA, the ESA requires installations to request concurrence on a submitted list of proposed and listed species and proposed and designated critical habitat that may be present in the action area or to request such a list from the FWS or NMFS. The FWS and NMFS have 30 days in which to concur with the submitted list or provide the requested list.

(2) If a listed species or critical habitat may be present in the action area, installations must begin a biological assessment within 90 days of receipt of the list to avoid having to reverify the species list with the FWS or NMFS before commencing the biological assessment. Installations must complete the biological assessment with a determination of effect within 180 days unless a different period is agreed to by the FWS or NMFS.

(3) If the installation determines that a listed species or its habitat does not occur or have the potential to occur in the action area and the FWS or NMFS concurs in the determination, a biological assessment is not required and the consultation process ends.

(4) If a proposed species or proposed critical habitat occurs or

has the potential to occur in the action area, the installation must confer with the FWS or NMFS if the action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (a(2) above). A biological assessment, however, is not required if only proposed species or habitat are present, unless the listing or designation becomes final. While not required, installations are encouraged to complete biological assessments for proposed species and habitats.

(5) Once the biological assessment process begins, the installation may not enter into any contract for construction or begin construction before it completes the biological assessment and, if required, formal consultation.

(6) Installations must submit the completed biological assessment to the FWS or NMFS for review. The FWS or NMFS must provide a written response within 30 days, concurring or nonconcurring in the findings of the biological assessment. Installations have the option of initiating formal consultation concurrently with the submission of the assessment.

e. Biological opinion.

(1) The result of formal consultation is a biological opinion of the FWS or NMFS on whether the proposed action is likely to result in jeopardy to the continued existence of the species and/or will result in destruction or adverse modification of critical habitat.

(2) A jeopardy biological opinion includes reasonable and prudent alternatives, if any are available. Reasonable and prudent alternatives are actions identified during formal consultation that will avoid jeopardy to listed species or destruction of critical habitat. The alternatives must be consistent with the purpose of the proposed action and capable of implementation by the installation. Proposed actions cannot proceed after a jeopardy or adverse modification biological opinion except according to any reasonable and prudent alternative contained therein. Installations will coordinate with the FWS or NMFS during formal consultation to assist with the development of reasonable and prudent alternatives.

(3) Biological opinions will contain an incidental take statement if the FWS or NMFS concludes that the agency action (or the implementation of any reasonable and prudent alternatives) and the anticipated incidental take itself, if any, will not violate section 7(a)(2) of the ESA. Incidental take refers to takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the action agency. If the FWS or NMFS anticipates take, the statement will include nondiscretionary reasonable and prudent measures that the installation must undertake to minimize incidental take. If the installation proceeds in compliance with the terms and conditions of the incidental take statement, then a resulting incidental take is not a violation of section 9 of the ESA.

(4) The FWS or NMFS may issue a conference report in response to a request for a formal conference regarding a proposed species or proposed critical habitat. In such cases, the FWS or NMFS may adopt the conference report as the biological opinion when the proposed species is listed or critical habitat is designated, if the project and the status of the species or habitat have not changed in the interim.

(5) With the biological opinion, the FWS or NMFS may provide discretionary conservation recommendations, with a request for notification of their accomplishment. Installations will carry out such recommendations unless the installation determines, in coordination with HQDA (DAIM–ED) that the conservation recommendations are not feasible. If found not feasible, installations will notify the FWS or NMFS of the decision and the reasons.

(6) If the FWS or NMFS issues a jeopardy or adverse modification biological opinion, the installation must notify, through MACOM channels, HQDA (DAIM–ED and DAJA–EL) within 5 days and forward copies of the opinion. Unless changed through further consultation with the FWS or NMFS, the installation will comply with the reasonable and prudent alternatives and the reasonable and prudent measures (with the related terms and conditions) in the biological opinion. The installation must notify the FWS or NMFS of its final decision on the action.

f. Reinitiation of formal consultation. Formal consultation must be reinitiated under the following circumstances:

(1) The amount or extent of taking specified in the incidental take statement is exceeded.

(2) New information reveals effects of the action that may affect listed species or critical habitat in a way or to an extent not previously considered.

(3) The identified action is subsequently modified in a way that causes an effect to a listed species or critical habitat that was not considered in the biological opinion.

(4) A new species is listed or critical habitat is designated that the action may affect.

11–8. Recovery plans and proposed designation of critical habitat

a. Recovery plans developed by the FWS and NMFS guide the FWS and NMFS in consultations with other agencies under section 7 of the ESA. The Army should actively participate in the development of recovery plans, whenever possible, to ensure that the FWS or NMFS and the recovery teams appointed by the FWS or NMFS know and consider Army interests. For listed species present on Army installations, the Army should make a request to the FWS or NMFS to provide for Army representation on recovery teams. For recovery plans affecting only one MACOM, except as provided in b below, the MACOM will coordinate Army participation in the development process and the submission of formal comments to the draft recovery plan. For recovery plans affecting more than one MACOM, HQDA (DAIM–ED) will coordinate Army participation and official comment. Installations and MACOMs will coordinate with DAIM–ED before officially commenting on draft recovery plans.

b. In cases where DAIM–ED determines that a proposed recovery plan may significantly affect Army interests, it will coordinate Army participation in the development process and the submission of formal comments to the draft recovery plan.

c. The FWS and NMFS must consider economic and other relevant impacts, such as impacts on military training and testing, in designating critical habitat. Potentially affected installations should work closely with the FWS and NMFS during the designation process to ensure that these services understand mission requirements and minimize mission impacts. Installations will coordinate formal comments on the proposed designation of critical habitat with the MACOM and DAIM–ED.

11–9. Notice of ESA violations

a. Installations will immediately report, by telephone or electronic means, through MACOM channels to HQDA (DAIM–ED and DAJA–EL), any violation or suspected violation of the ESA. A written report will be made within seven days. Violations include failure to formally consult or prepare a biological assessment as required by the ESA, taking of listed species, and so forth. Written reports will include—

(1) A detailed factual summary of the violation(s) or suspected violation(s).

(2) Copies of any relevant correspondence from the FWS or NMFS.

(3) A summary of any command actions taken in response to the violation(s) or suspected violation(s).

b. Installations will coordinate with the MACOM and HQDA (DAIM–ED and DAJA–EL) in taking final action to correct any endangered species management problems contributing to the ESA violation(s).

11–10. Awareness training program

a. On installations with listed species or critical habitat, training and testing directorates, in coordination with the installation engineer (or environmental directorate where appropriate), will establish a mandatory, ongoing training program for personnel who may have contact with listed species or their habitats. Testing directorates are responsible for ensuring that users of test ranges receive appropriate

awareness training. Specific requirements for training and implementation are to be identified in the ESMP. The training will, at a minimum, cover the following topics:

(1) Identification of listed species and markings that identify restricted areas.

(2) Actions necessary to avoid injury to listed species and their habitat.

(3) The pertinent requirements of the ESA and applicable regulations.

(4) The importance of protecting listed species and biological diversity.

(5) The Army policy that mission accomplishment must be consistent with the conservation of listed species and critical habitats (para 11–la).

b. Installations are encouraged to use films, videos, posters, and other training aids as part of these programs. Installations should involve the FWS or NMFS regional and field offices in the development and implementation of training programs.

11–11. Inventory of plants and wildlife

Identifying and documenting the location of listed, proposed, and candidate species on an installation is crucial to effectively balancing mission and conservation requirements. Failure to properly inventory listed and proposed species can lead to violation of the ESA and costly disruption of military operations and construction activities upon discovery of such species. Installations will conduct initial, thorough inventories of plants, fish, wildlife, and habitat types on installation lands, using scientifically accepted methodology. Installations will conduct a 100 percent inventory of suitable habitat for listed, proposed, and category 1 candidate species that may occur on the installation. Prior to conducting inventories, installations will coordinate with the FWS and NMFS for guidance on appropriate field survey methodology and individuals and organizations qualified to conduct surveys. Inventories are to be conducted at least every ten years, or sooner, if required by ESMPs. Records of inventory data will be maintained permanently.

11–12. Integrated Training Area Management (ITAM) Program

a. ITAM is the primary Army program for balancing land use for military training and testing with natural resources conservation requirements, including the protection of listed species and critical habitats. The program provides the technical foundation to integrate these competing requirements. Effective implementation of ITAM requires close coordination and cooperation between the installation engineer (or environmental directorate where appropriate) and the training/testing directorate.

b. If ITAM is implemented on the installation, upon approval of an installation ESMP, the installation engineer, in coordination with the training/testing directorate, will integrate the ESMP's protective and conservation measures into ITAM planning. The training/testing directorate will consider ITAM generated data in scheduling and authorizing training/testing activities.

11–13. Funding

Endangered species management projects are funded through environmental channels and are included in the RCS–1383 reporting process. (See section 2–3.) The reporting and funding guidance for these projects is issued by HQDA (DAIM–ED).

11–14. Reintroduction and introduction of listed, proposed, and candidate species

The Army will support the reintroduction and introduction of federal and State listed, proposed, and candidate species on Army lands unless reintroduction/introduction will have a significant impact on the present or future ability of the Army to meet its mission requirements. Proposals for reintroduction/introduction on Army lands will not be approved or disapproved without a thorough assessment, of the impact of reintroduction/introduction on the environment and mission requirements and the potential benefits of reintroduction/introduction. The latter assessment may be integrated with required NEPA documentation. Prior to approving or disapproving proposals for reintroduction/introduction, installations must coordinate with the MACOM and HQDA (DAIM–ED).

11–15. Water rights

Installations with listed, proposed, or candidate aquatic species will determine the ownership of water rights necessary for the survival and recovery of these species. To the extent feasible, installation ESMPs will provide for the protection of water rights necessary to meet these needs. Water rights necessary to sustain aquatic species are commonly governed by the State. Installations should not rely solely on federal water rights to protect aquatic species. Where State water rights are necessary to meet installation conservation goals for listed, proposed, and candidate species, installation commanders should consider asserting water rights for their protection. All water rights issues will be coordinated with the environmental law specialist.

11–16. Warning signs

Warning signs for listed, proposed, and candidate specie and their habitat will conform to the following specifications. Signs will be constructed of durable material, ten inches square (oriented as a diamond), yellow or white in color, and of the design in figure 11–2. The graphic depicting the species, the lettering " Endangered Species Site" and the species name will be printed in black. The lettering " Do not Disturb" and " Restricted Activity" will be printed in red. All lettering will be 3/8 inches in height.

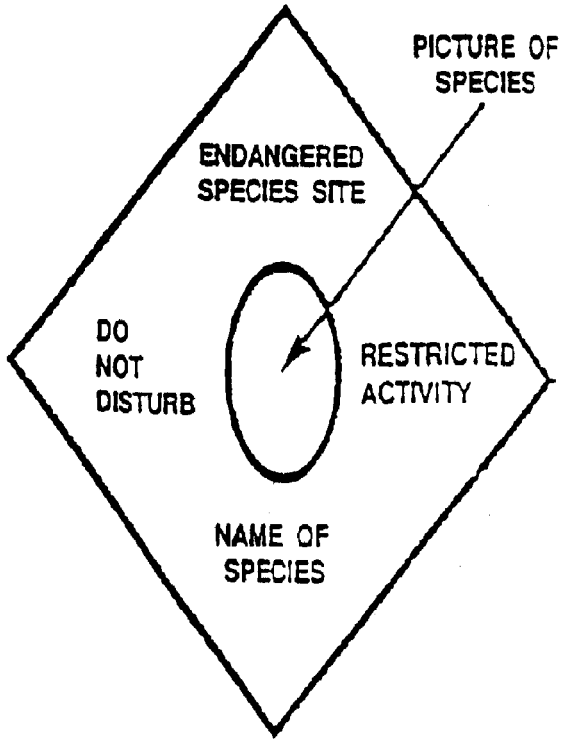

Figure 11-2. Endangered species warning sign

ENDANGERED SPECIES ACT COORDINATION

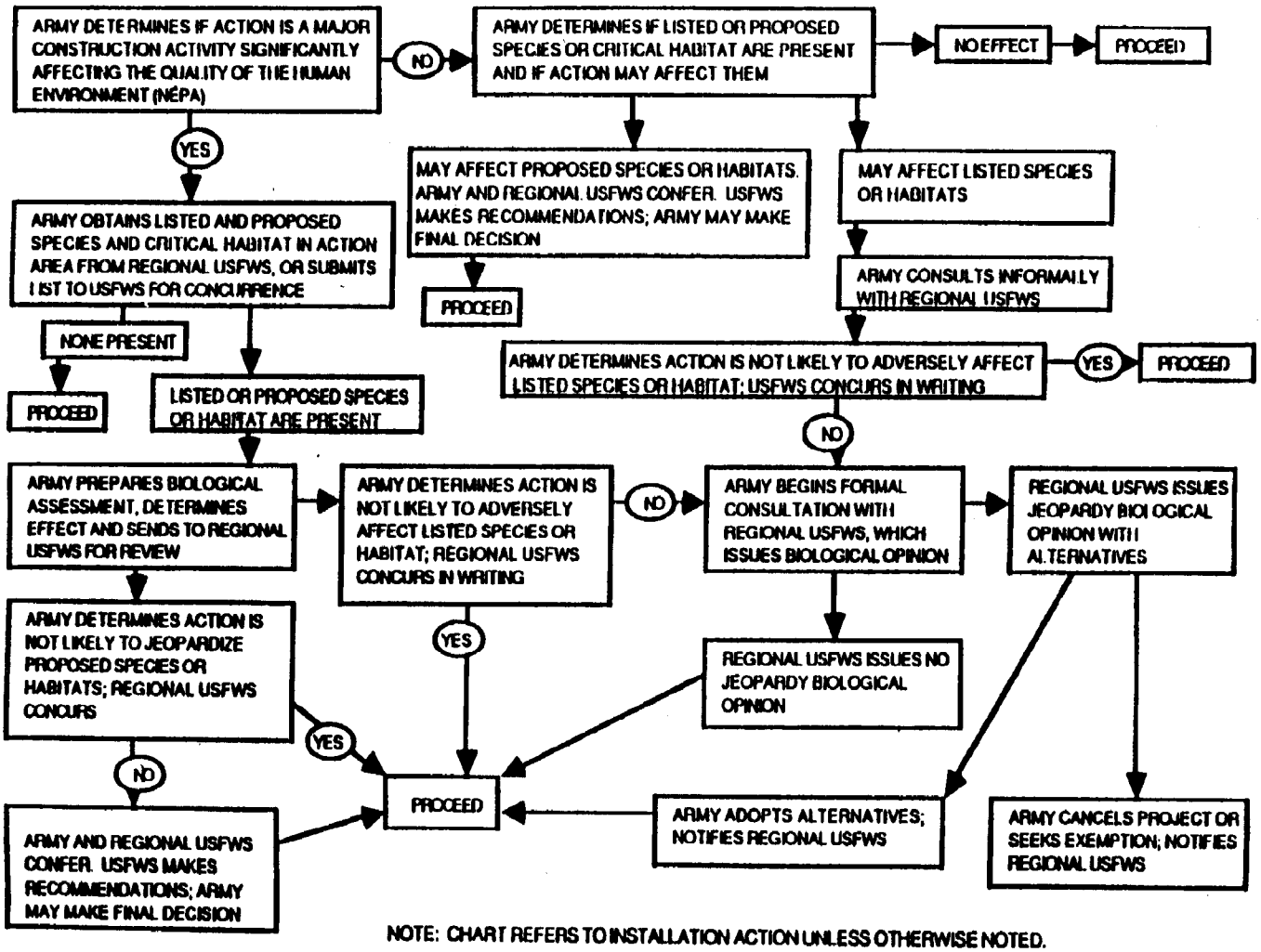

Figure 11-1. Endangered species actions

Appendix A
References

Section I
Required Publications

AR 27–40
Litigation. (Cited in para 8–le.)

AR 37–100
Account/Code Structure. (Cited in para 6–3b.)

AR 37–100
General Accounting and Reporting for Finance and Accounting Offices. (Cited in para 6–3b).

AR 190–5
Vehicle Traffic Supervision. (Cited in paras 8–2a and 8–4d.)

AR 190–29
Misdemeanors and Uniform Violation Notices Referred to U.S. Magistrates or District Courts. (Cited in para 8–le.)

AR 200–1
Environmental Protection and Enhancement. (Cited in paras 1–5c, 2–lc, 5–lb, 8–lc, 8–3, 8–4c, 11–6a(2), and 11–6g(1).)

AR 200–2
Environmental Effects of Army Actions. (Cited in paras 1–5c, 1–4d, 2–lc, 2–2a, 2–2b, 5–lb, and 11–60(1).)

AR 210–20
Master Planning for Army Installations. (Cited in paras 2–2b, 7–2, 8–2b, 9–2b, and 116a(5).)

AR 210–50
Family Housing Management. (Cited in paras 4–2a and 4–2b.)

AR 210–190
Post Cemeteries. (Cited in para 4–3a.)

AR 215–2
The Management and Operation of Army Morale, 6 Welfare and Recreation Programs and Nonappropriated Fund Instrumentalities. (Cited in paras 7–la and 8–2a.)

AR 215–5
Nonappropriated Funds Accounting Policy and Reporting Procedures. (Cited in para 8–2a.)

AR 335–15
Management Information Control System. (Cited in para 9–6.)

AR 405–30
Mineral Exploration and Extraction. (Cited in para 2–1le.)

AR 405–80
Granting use of Real Estate. (Cited in para–14b.)

AR 405–90
Disposal of Real Estate. (Cited in applicability statement and para 5–2b)

AR 420–10
Management of Installation Directorate of Engineering and Housing. (Cited in paras 1–4b, 1–4c, 2–24, and 3–22a).

AR 420–22
Preventive Maintenance and Self–Help. (Cited in para 4–2a.)

AR 420–40
Historic Preservation. (Cited in paras 1–5c, 2–1b, 4–8j, and 5–lb.)

AR 420–76
Pest Management. (Cited in paras 2–6d.)

DA Pam 420–7
Natural Resources—Land, Forest and Wildlife Management. (Cited in paras 1–1, 2–17, 5–2, and 5–4d.)

TM 5–629
Herbicide Manual. (Cited in para 2–18b.)

TM 5–630
Land Management. (Cited in paras 2–18b, 4–8a, 9–3a, 9–3b, and 9–5).

TM 5–631
Forest Management. (Cited in paras 5–4d, 9–3a, 9–3b, and 9–5.)

TM 5–632
Entomology Manual. (Cited in para 2–18b.)

TM 5–633
Fish and Wildlife Management. (Cited in paras 9–3a, 9–3b, and 9–5.)

TM 5–635
Outdoor Recreation. (Cited in paras 9–3a, 9–3b, and 9–5.)

50 CRF 222
NMFS Endangered Fish and Wildlife. (Cited in para 11–2c.)

50 CFR 227
NMFS Threatened Fish and Wildlife. (Cited in para 11–2c.)

50 CFR 402
Interagency Cooperation—Endangered Species Act of 1973, as amended. (Cited in paras 11–7a(1)(b) and 11–7(a) (2).) Endangered Species Act (ESA) of 1973, as amended (16 USC 1531–1544).Cited in paras 11–la and 11–7a(1)(a).) National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321–4370d). (Cited in para 11–6f.) SIKES Act, as amended (16 USC 670a–670o). (Cited in chap 9.)

Section II
Related Publications

A related publication is merely a source of additional information. The user does not have to read it to understand this publication.

AR l–l
Planning, Programming, Budgeting, and Execution System.

AR 5–3
Installation Management and Organization.

AR 5–20
Commercial Activities Program.

AR 10–5
Organizations and Functions, Department of the Army

AR 40–5
Preventive Medicine

AR 40–574
Aerial Dispersal of Pesticides.

AR 210–21
Army Ranges and Training Land Program

AR 415–15
Military Construction, Army (MCA) Program Development.

AR 415–20
Project Development and Design Approval

AR 419–35
Minor Construction

TC 25–1
Training Land

MIL HDBK 1028/8A
Design of Pest Management Facilities. (This publication is available from the Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120–5099.)

DOD Directive 1015.6
Funding of Morale, Welfare, and Recreation Programs (MWR)

DODI 7310.5
Accounting for Production and Sale of Lumber and Timber Products

Section III
Prescribed Forms
This section contains no entries.

Section IV
Referenced Forms
This section contains no entries.

Appendix B
Format for Installation Nominations for the Secretary of Defense Natural Resources Conservation Award

B–1. Introduction
a. Mission or missions carried out on the nominated installation's property.

b. Approximate civilian and military population (unless classified) of the installation and all properties that are included in the installation's natural resources management plan.

c. Total acres under the installation's natural resources management plan, followed by a description of program component acreage (improved, semi–improved, and unimproved acreage; acres of managed forest, wildlife, grazing, agriculture, unique natural areas, lakes, or wetlands, miles of streams or coastline; and acres available for hunting, fishing, and other outdoor recreation).

d. Significant natural features of the installation, such as geological, botanical, and archeological assets.

B–2. Background
a. List all components of the integrated natural resources management plan and the dates of preparation or revision of its component parts.

b. List the cooperative agreements that support the natural resources management plan and the dates of preparation or revision.

c. Describe the organization and staffing of the installation's natural resources management program.

d. Describe any committees or boards that influence the installation's natural resources management program.

B–3. Program summary
a. Describe the most outstanding program features and accomplishments of the past 3 years.

b. Describe the objectives of the natural resources management plan and the degree of attainment of each objective during the past 3 years.

B–4. Accomplishments
Describe activities and accomplishments in the following areas (if applicable):

a. Land use management.

(1) Erosion control and other water quality protection.

(2) Water conservation.

(3) Agricultural land management, including prime and unique farmland protection.

(4) Natural resources improvements and benefits due to outleases.

(5) Grounds improvements and landscaping.

(6) Anti–litter programs.

(7) Considerations in new construction planning.

(8) Coordination and cooperation with USDA–SCS, County Agricultural Extension Service, and other land management agencies.

b. Forest management.

(1) Multiple–use coordination of forestry, outdoor recreation, wildlife, esthetics, and endangered species.

(2) Reforestation.

(3) Timber stand improvement.

(4) Improvements in planning, budgeting, and use of manpower, supplies, and equipment.

(5) Use of prescribed burning.

(6) Establishment and protection of unique forest areas.

(7) Cooperation efforts with U.S. Forest Service, State foresters, and similar groups or agencies.

c. Fish and wildlife.

(1) Variety of species and habitats.

(2) Protection of federal and State listed threatened and endangered species and their habitats. (surveys, plans and other accomplishments)

(3) Permanent food plots, wildlife openings, escape cover, and so forth.

(4) Game and nongame fish and wildlife habitat improvements.

(5) Reintroduction and stocking.

(6) Degree of access and use of hunting and fishing opportunities by installation personnel and the general public.

(7) Improvements in permit program; fee schedule for hunting, fishing, or other opportunities; ratio of permits to general public versus DOD personnel.

(8) Identification and protection of significant wildlife resources.

d. Other natural resources. Protection of areas of cultural, archeological, geological, or ecological significance.

e. Outdoor recreation.

(1) Parks, camping, picnicking, swimming, hunting, horseback riding, boating, bird–watching, and trails (nature, hiking, and bicycling).

(2) Off–road vehicle use and control.

(3) Permit program.

(4) Estimated number of visitors (general public and DOD personnel).

(5) Cooperation and coordination with federal, State, and local outdoor recreation agencies.

f. Pest management. Application of integrated pest management that support and improve the installation's natural resources management program.

g. Conservation education. (on and off installation)

(1) Natural resources management regulations and enforcement program.

(2) Gun and water safety, woodsmanship, camping, and outdoor ethics programs.

(3) Scouting, public school classes, and other group activities related to natural resources conservation.

(4) Research and development activities.

h. Community relations.

(1) Public awareness programs and involvement in natural resources conservation programs on and off the installation.

(2) Affiliation of installation personnel with civic and private natural resources conservation organizations and such professional conservation societies.

(3) Cooperation with federal, State, local, and private natural resources conservation organizations and academic institutions.

i. Environmental enhancement. Indicate how accomplishments and improvements in the natural resources management program have improved the quality of life at the installation and for surrounding communities.

Appendix C
Format for Individual Nominations for the Secretary of Defense Natural Resources Conservation Award

C–1. Background information
Include the nominee's name, title or position, employing organization, and DoD employment history.

C–2. Position description
Provide a summary of the nominee's major routine duties and tasks during the preceding 2 calendar years.

C–3. Special accomplishments
Identify, under applicable topical headings, the nominee's special achievements and accomplishment for the preceding 2 calendar years. Indicate specifically how these efforts and accomplishments exceeded his or her normal duties and tasks.

C–4. Awards and achievements
List and describe awards and other special recognition given to the nominee during the past 5 years. Describe related professional achievements, including community service work and participation in professional organizations.

Glossary

Section I
Abbreviations

ACE
Assistant Chief of Engineers

ADC
Animal Damage Control

AIF
Army industrial fund

AMC
Army Materiel Command

AMS
Army management structure

APHIS
Animal and Plant Health Inspection Service

ASA,I,L,&E
Assistant Secretary of the Army (Installations, Logistics, and Environment)

BO
biological opinion

COE
Corps of Engineers

CONUS
continental United States

DA
Department of the Army

DCSOPS
Deputy Chief of Staff for Operations and Plans

DEH
Directorate of Engineering and Housing, or Director of Engineering and Housing

DEMIS
Defense Environmental Management Information System

DOD
Department of Defense

DPTM
Directorate of Plans, Training, and Mobilization

EA
environmental assessment

EIS
environmental impact statement

ESA
Endangered Species Act

ESMG
endangered species management guideline

ESMP
Endangered Species Management Plan

ESOH
Environment, Safety and Occupational Health

EQCC
Environmental Quality Control Committee

FADEP
Forces Command Animal Disease Eradications Plan

FY
fiscal year

FORSCOM
Forces Command

FWS
U.S. Fish and Wildlife Service

HQDA
Headquarters, Department of the Army

ITAM
Integrated Training Area Management

LCTA
Land Condition Trend Analysis

MACOM
major Army command

MIPR
military intradepartmental purchase request

MOU
memorandum of understanding

MWR
morale, welfare, and recreation

NEPA
National Environmental Policy Act

NMFS
National Marine Fisheries Service

OACE
Office of the Assistant Chief of Engineers

OASA(I,L,&E)
Office of the Assistant Secretary of the Army (Installations, Logistics and Environment)

ODCSOPS
Office of the Deputy Chief of Staff for Operations and Plans

O&M
operation and maintenance

OCONUS
outside the continental United States

ORV
off–road vehicle

OTJAG
Office of the Judge Advocate General

PAS
Preliminary Assessment Statement

QA
quality assurance

RCS
Reports Control Symbol

R&D
research and development

RDT&E
research, development, test, and evaluation

RPMP
Real Property Master Plan

SHPO
State Historic Preservation Officer

SJA
Staff Judge Advocate

SOFA
Status of Forces Agreement

TNC
The Nature Conservancy

TRADOC
U.S. Army Training and Doctrine Command

USDA-FS
United States Department of Agriculture–Forest Service

USDA-SCS
United States Department of Agriculture–Soil Conservation Service

Section II
Terms

Action
All activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies in the United States or upon the high seas.

Action Area
All areas to be affected, directly or indirectly, by the federal agency action and not merely the immediate area involved in the action.

Agricultural outlease
Use of Army lands under a lease to an agency, organization, or person for growing crops or grazing animals.

Biological Assessment
Information prepared by or under the direction of a federal agency using the procedures in 50 CFR 402.12 concerning listed and proposed species and designated and proposed critical habitat that may be present in the action area and the evaluation of potential

effects of the action on such species and habitat.

Biological diversity
The variety of life and its processes. It includes the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.

Biological evaluation
A written document setting forth an installation's biologically supportable rationale for determining that an action will have no effect on a listed species or critical habitat. A biological evaluation is an informal document and is used for actions only if a biological assessment is not required.

Biological opinion
The document that states the opinion of the FWS or NMFS as to whether or not the federal agency action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Carrying capacity (outdoor recreation)
The maximum amount of recreation activity and number of participants that a land or water area can support in a manner compatible with the objectives of the natural resources management plan without degrading existing natural resources.

Carrying capacity(wildlife)
The maximum density of wildlife that a particular area or habitat will support on a sustained basis without deterioration of the habitat.

Coastal state
A State of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. The term also includes Puerto Rico, the Virgin Islands, Guam, and American Samoa (PL 92–583).

Coastal zone
The coastal waters (including the lands therein and thereunder) and the adjacent shores (including the waters therein and thereunder) strongly influenced by each other and in proximity to the shorelines of the several coastal States as specified in the approved State Coastal Zone Management Plan. Includes islands, transitional and inter–tidal areas, salt marshes, wetlands, and beaches (PL 92–583).

Commercial forest land
Land which is capable of economically producing crops of industrial wood in excess of 20 cubic feet per acre per year under management and is not programmed for another use that would preclude future forest development. Acreage classification will also depend upon products produced and available markets. Normally, land areas of less than 100 acres total forest land for an installation will not be classified as commercial forest land.

Conference
The process which involves informal discussions between a federal agency and the FWS or NMFS regarding the impact of an action on proposed species or proposed critical habitat and recommendations to minimize or avoid the adverse effects.

Conservation
The wise use and scientific management of natural resources according to principles that provide optimum public benefit, continued productivity for present and future generations, and support of the military mission.

Conserve/Conservation
To use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to chapter 11, this regulation and the ESA are no longer necessary.

Conservation recommendations
Suggestions of the FWS or NMFS regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information.

Critical habitat
Specific areas within the geographical area occupied by the species at the time it is listed in accordance with the Endangered Species Act, on which are found those physical or biological features (1) essential to the conservation of the species, and (2) which may require special management considerations or protection; It also includes specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the Endangered Species Act, upon a determination by the Secretary of Interior or Commerce that such areas are essential for the conservation of the species. The areas formally designated as critical habitat by the FWS or NMFS and listed in 50 CFR 17 and 226.

Cumulative effects
Those effects of future State or private activities, not involving federal activities, that are reasonably certain to occur within the action area of the federal action subject to consultation.

Destruction or adverse modification
The direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

Effects of an action
Effects of an action are the direct and indirect effects on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed federal projects in the action area that have already undergone formal or early consultation under section 7 of the ESA, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

Endangered and threatened species

a. Endangered species. Any species, plant or animal, which is in danger of extinction throughout all or a significant portion of it's range as listed by the US Department of the Interior.

b. Threatened species. Any species, plant or animal, which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of it's range, as listed by the US Department of the Interior.

c. Candidate species. Any species, plant or animal, which is being considered for listing as threatened or endangered by the US Department of the Interior.

d. State listed species. Any species, plant or animal, which is listed by the appropriate State as threatened or endangered within the State, but may not be listed by the US Department of the Interior.

Endangered species management guidelines (ESMG)
Guidelines issued by MACOMs or HDOA in accordance with this regulation to promote effective management of proposed and listed species on Army installations.

Endangered species management plan (ESMP)
A plan developed in accordance with this regulation for the management of listed or proposed species or critical habitat.

Environmental quality
The development and maintenance of harmonious interaction between man and that part of the world in which living organisms can sustain their kind.

Facilities Engineer/Facilities Engineering Activity/Director of Engineering and Housing (DEH)/Director of Public Works (DPW)/or the appropriate environmental directorate
The installation level organization responsible for the management, operation and maintenance of all real property to include: buildings, pavements, utility systems, natural and cultural resources, and environmental programs.

Fish and Wildlife Cooperative Plan
The component of the integrated natural resources management plan (Part IV), that describes how fish and wildlife resources at an installation will be managed and that has been coordinated and approved by the Installation Commander, the US Fish and Wildlife Service and the appropriate State agency.

Forest management
The science, the art and the practice of managing the natural resources that occur on or in association with forest lands. The achievement of management goals will result in optimal benefits to humankind and indigenous forest ecosystem inhabitants.

Forest products
All plant materials in wooded areas that have commercial value.

Formal consultation
The process between the FWS or NMFS and a federal agency that commences with the federal agency's written request for consultation and concludes with the issuance of a biological opinion from the FWS or NMFS.

Game species
Fish and wildlife that may be harvested in accordance with Federal and State laws.

Greenhouse
A building designed for producing or protecting plants and normally provided with a heating unit.

Grounds
This definition is used to classify installation acreage according to the level of grounds maintenance required and includes all land and water acreage for which an installation commander has responsibility (including satellite areas). Grounds are grouped into the following three categories:

a. Improved grounds. This category includes acreage on which intensive grounds maintenance activities must be planned and performed annually as fixed requirements. Activities include mowing, irrigation, fertilization, cultivation, aeration, seeding, sodding, spraying, pruning, trimming, weed, dust and erosion control; drainage, planting for landscape effect, wind and sound abatement, and other intensive practices.

b. Semi–improved grounds. This category includes areas on which periodic recurring grounds maintenance is performed but to a lesser degree than on improved grounds. Practices normally include such cyclic variables as soil sterilization, weed and brush control, drainage maintenance, mowing for fire protection and major land repair/restoration/rehabilitation as may result from mission activities. Semi–improved grounds acreage may be combined with improved grounds acreage for reporting purposes when only two categories of grounds (improved and other than improved) are used.

c. Unimproved grounds. All other acreage (including water areas, areas under buildings and surfaced areas), not classified as improved or semi–improved. Practices and intervals of attention are generally unpredictable such as might evolve from flood, fire, insects, or disease epidemics.

Habitat
An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies any of their life requirements.

Incidental take
Takings otherwise prohibited, that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the federal agency.

Informal Consultation
An optional process that includes all discussions, correspondence, etc., between the FWS or NMFS and a federal agency prior to formal consultation, if required.

Integrated Training Area Management (ITAM) Program
An Army program for the management of military training and testing lands, and other land uses which provides for: standardized land condition trend analysis (LCTA) to inventory and monitor land; rehabilitation, revegetation and maintenance technologies; environmental awareness; decision support systems; and integration of military training requirements with land capabilities.

Jeopardize the continued existence of
To engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Land Condition–Trend Analysis (LCTA) methods
Standardized land (soil, vegetation, topographic and wildlife) inventory and monitoring procedures used for the analysis and comparability of Army lands over time.

Land management
The planning and execution of programs to improve, utilize and maintain all land and water areas for the greatest long–term net public benefit while supporting the military mission. Included are subordinate land uses that are mutually compatible and consistent with maintaining environmental qualities.

Land use capability
The classification of land according to its ability to support a designated use.

Lathhouse
A structure which is constructed for the most part of spaced wood or metal lath, tropical leaves or fibers, or similar materials, and is designed for producing or protecting plants.

Listed Species
Any species of fish, wildlife, or plant which has been determined to be endangered or threatened under section 4 of the ESA. Listed species are found in 50 CFR 17.11–17.12.

Major construction activity
A construction project (or other undertaking having similar physical impacts) which is a major federal action significantly affecting the quality of the human environment as referred to in NEPA.

Multiple use
The integrated management of all natural resources, each with the other, to achieve the optimum use and enjoyment while maintaining the environmental qualities, ecological relationships and aesthetic values in proper balance.

Natural resources
The viable and/or renewable products of nature and their environments of soil, air, and water. Included are the plants and animals occurring on grasslands, rangelands, croplands, forests, lakes, and streams.

Natural Resources Management Professional
Individual with an undergraduate or graduate degree in the natural resources management sciences and who has responsibility for managing natural resources on DOD lands on a regular basis and is a DOD employee.

Natural Resources Law Enforcement Professional
A DOD employee with a background in natural resources management and/or law enforcement and who has received natural resources law enforcement training resulting in a recognized commission from a certified law enforcement training facility.

Nongame species
Species not harvested for recreation or subsistence purposes.

Noxious weed
Plant species identified by federal or State agencies as requiring control or eradication.

Nursery
An outdoor area where trees, shrubs, turfgrass, or flowers are produced or held for transplanting.

Off–road vehicle
A vehicle designed for travel on natural terrain. The term excludes a registered motorboat confined to use on open water and a military, emergency, or law enforcement vehicle during use by an employee or agent of the Government or one of its contractors in the course of employment or agency representation.

Outdoor recreation
Recreational program, activity, or opportunity that is dependent on the natural environment. Examples are hunting, fishing, trapping, picnicking, bird–watching, off–road vehicle use, hiking and interpretive trails use, wild and scenic river use, and underdeveloped camping areas. Developed or constructed activities such as golf courses, lodging facilities, boat launching ramps, and marinas are not included.

Outdoor Recreation Cooperative Plan
A plan for the development, enhancement, operation, and maintenance of public outdoor recreation resources on an installation which has been mutually agreed upon by the Installation Commander, National Park Service, and the appropriate State agency.

Prescribed burning
Skillful application of fire to natural fuels under conditions of weather, fuel moisture, soil moisture, etc., to allow confinement of the fire to a predetermined area while producing the intensity of heat and rate of spread required to accomplish certain planned benefits. These benefits may include all or one or more objectives of silviculture, wildlife management, grazing, hazard reduction etc. Its objective is to employ fire scientifically to realize maximum net benefits at minimum damage and acceptable cost.

Proposed critical habitat
Habitat proposed in the Federal Register to be designated or revised as critical habitat for any listed or proposed species.

Proposed species
A fish, wildlife, or plant species that is proposed in the Federal Register to be listed as endangered or threatened under the ESA.

Reasonable and prudent alternatives
Alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the FWS or NMFS believes would avoid the likelihood of jeopardizing the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Reasonable and prudent measures
Those nondiscretionary actions the FWS or NMFS believes necessary or appropriate to minimize the impacts, that is, the amount or extent, of incidental take.

Recovery
The improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the ESA.

Recovery plan
A plan developed by the FWS or NMFS, as required by the ESA, for the conservation, survival, and recovery of a listed species.

Special State (installation) permit
Prepared and issued by the installation is accordance with 10 USC 670 and the fish and wildlife cooperative plan to individuals participating in hunting, fishing, or trapping activities. Valid only on the installation where issued. A fee is collected and used for fish and wildlife management activities in accordance with the Fish and Wildlife Cooperative Plan.

Sustained yield
The production of renewable resources a land or water area can maintain in perpetuity at a given intensity of management without impairment of the resource.

Take
Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

Timber management
The conduct of work necessary to measure and identify salable wood products on those forest areas managed for profitable growing of sawtimber, pulpwood, poles, ties, posts, piling, and other forest products on a sustained yield basis.

Wetlands
Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Common terms used to describe various wetlands include marshes, bogs, swamps, small ponds, sloughs, potholes, river overflows, oxbows, mud flats, and wet meadows.

Wildlife management
The practical application of scientific and technical principles to wildlife populations and habitats so as to maintain such populations essentially for ecological, recreational, and/or scientific purposes.

Section III
Special Abbreviations and Terms

This publication uses the following abbreviations, brevity codes, and acronyms not contained in AR 310–50.

ECAS
Environmental Compliance Assessment System

EPA
Environmental Protection Agency

ESOH
Environment, Safety and Occupational Health

DPW
Directorate of Public Works

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